

JC Raulston Arboretum

Friends of the Arboretum Newsletter

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J. C. Raulston

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Notes from the Arboretum

It seems like each issue of the newsletter has one section which just doesn't quite get done for inclusion - and this time it is perhaps the most important section of introductory comments and happenings of recent months. It's all much too complicated to possibly explain (this is being written over Wyoming for mailing back to the office to include and complete this issue) and we're also out of page space for this issue - but a lengthy section of people, happenings and plants will be back in the next issue. Lots happening in and with the arboretum - and the arboretum looks the best ever. Happy Summer. JCR.

LATHHOUSE COMMENTS

Tales from the "Crypt"-omeria (or how does your lath house grow) by Tony Avent.

If you have ventured into the lathhouse in the last couple of years, you have witnessed a major transformation. What began by removing a few overgrown rhododendrons transformed into a full-fledged obsession. Knowing that plant folks are not normal, one thing led to another and as they say, the rest was history.

As you know, most of the speciality areas in the arboretum have curators and the lathhouse is no exception. Although the area appears small, the amount of work required is more than a part-time volunteer can handle. After a year of head-high weeds, rotting labels, and some constant urging, we have set up a volunteer group which mysteriously appears once a week (Thursday evenings) to take care of fun chores such as weeding, labeling, pruning and other exciting things. We refer to ourselves as the "Dead Plant Society" (we sort of stole the name), since we remove dead plants, kill live weeds, and install labels that resemble little tombstones. You will also be interested to know that we have also started the first Adopt-A-Rodent program at the arboretum - call me for details.

Well, since we are an arboretum, I guess we should talk about plants. One of the highlights of this spring was the first flowering of Rhododendron 'Trude Webster'. A gift to JC in the early 80's, and described by JC as his favorite rhododendron, 'Trude' had grown vigorously but had never flowered. After renovation, along with threats by a rototiller and a bag of lime, 'Trude' rewarded us with 20 tremendous flower clusters this spring.

I have also been very excited with the development of our Hosta collection. Thanks to donations from local hosta growers, we now have a wonderful collection that includes most of the top 60 cultivars. Our fern collection is also maturing nicely with over 60 varieties. For those that enjoy Tricyrtis, the collection has been in shambles for the last couple of years, thanks to our pet rat and pet rototiller. With renovation and new plantings, all looks well for a great flowering season.

Among other pleasant surprises was a Russell hybrid lupine that I grew from seed two years ago, which returned and rewarded us with 14 flower spikes. Even our near-death weeping golden chain tree (Laburnum X watereri 'Pendulum') managed to put forth a few flower spikes. How about Iris rossii? . . . if you missed this tiny gem in early spring, you missed a real treat. Although they are still small, we have purchased a new collection of heaths and heathers . . . we will keep the names on these. Many of the heaths and heathers seem to do quite well in the lath house.

It's amazing what rototilling will do to such an environment. I was delighted to rediscover a wonderful variegated miniature heart-shaped violet which had not been seen in years. Also Arisaemas and Dicentra have been found in all corners of the lath house. We have also done a little sharing with Dr. Paul Fantz, the taxonomist in the NCSU Horticulture Science Department. Dr. Fantz is doing taxonomic work to sort out the Liriope and Ophiopogon species and cultivars. If you have a new or different variety of either of these plant groups, please let me know and I will pass the plant along for inclusion into his comprehensive study.

This has also been the year of Houttuynia and bamboo, two of the most cherished gems in the lath house (cough, cough). Everyone from the smallest child to the strongest visitor have tried to free the front lath house bed from the grips of JC's cute little bamboo (Note - I didn't acquire or plant it there! JCR). Now I don't profess to be a know-it-all, but I couldn't figure out why no one had tried to kill bamboo with a selective grass herbicide which could be sprayed over top of the desirable plants. So with backpack sprayer in hand we went on a Rambo-page. It was truly exciting to watch the bamboo gasp for its last breath. As for the Houttuynia, also called the lemon pledge plant, hand-weeding is still our best solution.

This will do for a first article. I guess we will see you again whenever the next newsletter is due; I mean arrives! Please don't hesitate to give me a call if I can be of assistance (919-772-4794), or write to me at 9241 Sauls Road, Raleigh, NC 27603. Till next whenever . . . happy gardening.

NOTES FROM THE ROAD

European Study Leave Travels Part III. Continued from Issues #18-19. April 5 to May 17 - Holland, France, Italy, Greece, Turkey, Yugoslavia, Hungary, Austria, Germany, Belgium. (condensation of 105 original typed pages).

Note: This section is the least "plant oriented" of the 5 parts which will be published on the 5 months of 1988 sabbatic travel in Europe. In general - the further south and east one goes in Europe, the less intense or developed are the public gardens and nursery/ornamentals industries.

Tuesday - April 5, 1988. Harwich, England to Holland. Leave Beth Chatto's garden and back to Harwich - planning to get gas, seasickness medicine, magazines, and groceries - but not much luck as everything in town is closed after 5:00 PM. So just head on to the dock - park and into the lounge where I settle into typing in log on a corner bench. Finally time to go get in car - line slowly moves up ramp and winds around and into the ship - maneuver into tight fit.. Can't help but think that a ship just like this rolled over and sank last year with such loss of life - it is so huge it is hard to imagine how that could ever happen. Get room assignment, settle in and to bed about 11:00. Bed is comfortable but swaying can still be felt even through the sea is very calm.

Wednesday - April 6, 1989. Keukenhof, Holland to Paris, France. Awake with door knock at 5:30. Skip shower and scurry around to get back to car - unnecessarily as it turns out and should have taken time to eat breakfast on the ship. Up and out of the ship - waved through customs with no problem and off the ship by 7:00 - sun shines as red orb which gradually brightens through the morning. Have no Dutch money as I forgot to get it on the ship last night before the bank closed, and it did not open this morning to my surprise. Only 15 miles from Keukenhof, so head there hoping to find place open to get money.

On to Keukenhof, the largest bulb display garden in the world with over 6 million bulbs in 70 acres of landscaped plantings - there just as it opens and only three cars in the huge fields of parking - but filling rapidly when I leave later about 11. Able to get money changed at the gate - in and the season is still early - last of the crocus and at the early daffodils stage, a few of the species type tulips, Anemone blanda, etc.. Walk the grounds to get an idea of what is there before doing any photography, through the floral design center. Have to laugh at the ugly "England" garden in the "international gardens" display; at least they don't even try to do an "American" garden whatever that would be. To the Beatrix pavilion where they are having trials and judging of new hyacinth, freesia, and amaryllis cultivars. Some interesting new colors in hyacinths - and discover a new one on display named for NCSU's Dr. DeHertogh - a very deep blue. Most interested in a double-flowered red called 'Hollyhock'. On to the bulb varieties display house where I make a long list of new daffodil cultivars which interest me to try to get for the arboretum. Certainly an interesting stop and worthwhile - but not enough "new" information (considering several previous visits) to be worth what it really cost in extra time, mileage, ferry, gas, etc. - probably \$200 extra for this two hour look at a less than peak time. Work my way out to the freeway where I shortly hit a stopped up blockage with everyone standing still. After a 30 minute wait finally going again with no idea of what the blockage was - miles of cars and trucks backed up. Drive from noon to five to go from the edge of Belgium to the car dealer in Paris At roughly 85 miles an hour this light car is just too dangerous to handle at that speed and very uncomfortable with it - but slowest of cars on road.

Follow the map closely as I get to Paris and back to the Renault dealer successfully to get a new set of coupons and accident report forms (to replace those stolen in Portugal) and leave. Plunge into the town in hunt of a hotel trying to get to the student district at St. Michaels near Notre Dame cathedral. Much winding around in confusing and frantic traffic to finally get there and I am worn out on the city. Park and hunt a hotel - most are filled but finally get a place in ideal location within one block of "my" food street. Turns out to be one of only 5 or 6 places listed in Let's Go - amazing considering there are a million hotels in the city; and it is only double the rate quoted in the guide. Head out to get an Algerian sandwich which is my very old Paris food standby - cheap, delicious and filling. Nice to see the place still there and the prices still the cheapest of anything available. Eat - wander and look, going by Notre Dame Cathedral and admiring it as usual. To bed fairly early. The 150 year old hotel is interesting with black wooden beams through walls and ceiling.

Thursday - April 7, 1988. Paris, France. Very quiet location and good nights sleep - breakfast a meager one of the superb French bread with so-so coffee (I'll miss the hearty English B&B breakfasts in the coming month). Walk to the Jardin des Plants - admiring the new Institute for the Arab World as I go by - magnificent new building of curving glass and steel on the Seine. The garden was founded in 1635 as the king's medical garden and was one of the most significant of European botanical gardens with many famous botanists working at the garden and many significant new introductions of plants to cultivation. Not a lot in bloom yet - a wonderful cherry with horizontal branches but no name; the alpine garden is locked up - unfortunate as it is probably the most interesting and best kept part of the garden with over 2,000 species in varied habitats. Go up the mount/maze for the first time with several interesting old plants; shocked that the old black locust (the oldest Robinia pseudoacacia in Europe and the oldest tree in Paris - planted in 1601) is being so mistreated with lumber piled around it during renovation of a nearby building and grown up in weeds and overcome with English ivy growth - shameful!

Wander down the Seine and through a new riverside sculpture park; to the old flower market near Notre Dame and then another streetside retail nursery section on the north side of the Seine which is quite interesting and take many photos. Packaged deciduous tree and shrub plants are sealed in large poly bags with eye appealing dramatic color photography (some 8" X 36"!) of each plant in the bag. Wonder about the many pallets of seed potatoes for sale - there's not a garden plot in 10 miles in any direction in this massive urban area - where are they planted?

On to the Louvre Museum and decide not to even try to tackle it - around the end and there is a display about the new Pei pyramid which is in place now with most current work going on underground. The pyramid is more modest than I expected - needs to be double the size. Up through the Tulleries and to the Orangerie Museum - my fourth trip here over a decade to try to see it, and finally the restoration is complete and again open. Well worth the wait as the Monet galleries with the waterlily panels which surround the oval display rooms are magnificent (his last works created specifically for this building) - a world cultural treasure. There are also enough Picassos, Cezannes, Renoirs, etc. in the upper floor to be a major museum anywhere else in the world and just a handful of people are traipsing through.

To the new Musee D'Orsay just across the river - a line waiting just to get in the outside door, where there is another line to buy tickets, and another line to get in the museum door - obviously as popular as the books have said. A most dramatic space inside - huge vaulted room with lots of glass (originally a train station). Spend perhaps three hours - at least enough to get the museum staggers and glazed eyes - so much to see and experience. Stop in the bookstore on the way out with so many things I would like - browse through books on Gaudi, French gardens, new Paris architecture of the last decade with a description of Le Cube now being built - the most amazing building - a gigantic perfect cube with two of the wall "sides" removed to make a gigantic arch 30 stories high (many photos and TV coverage shots of it during the recent Bastille Day celebrations). Out and walk back across the river and through the Tulleries working my ways to Les Halles - the dramatic and fashionable contemporary underground shopping center. Try shopping but everything is 3-5X the price of NYC for the same items so no buying. A coke and a look at the Pompeadeu (Art) Center from the outside and stagger back to the hotel.

Friday - April 8, 1988. Paris, France. Down to the last 50 francs after dinner last night and laundry - so have to go to a bank to get a credit card advance - long, complicated and frustrating procedure through many banks. To post office and mail office things; enjoy an Algerian sandwich and a Greek honey pastry. Finally explore the Metro (subway) - a computer light map showing routes makes it easy - out to Chateau du Vincennes to see the Parc Floral. Easy trip - get out and not sure where to go - vaguely remembering the route. A 69 acre park created in 1969 for the International Flower Show held that year - and maintained as a public floral exposition park since. Have been there several times and always impressed by it - but the visit today has less of interest because so much of its effect depends on summer bedding display for interest. Highlights are massed hyacinths in drifts, primulas in the color beds by the lake, the many sculptures around the grounds. Get whistles blown at me and a reprimand by police for walking to the top of a high mound to photograph the contemporary water garden (in trouble already, so shoot before coming down - great shot!). Foggy, misty, cloudy day. Back to the Metro - interesting to see TV's in terminals for people to watch while waiting. Evening of fun just watching the crowds of people and all the street activities which swirl about the area - what a wonderful city to be in when one is 16-26, full of life and in love. There is no question Paris is THE ultimate "world class city". Given an unlimited budget (quite necessary as rock bottom slumming still runs \$150 a day) - I would rather spend a month in Paris than anywhere else in the world. With that an impossibility - I treasure a day or two squeezed in here and there over the years.

Saturday - April 9, 1988. Paris to Mulhouse, France. Pack up everything - can now carry it in a single trip with little effort. If I could eliminate my "work" materials would be down to a small pile of about five pounds of clothing. The rest is a ton of books, camera and computer gear. Head out of the city with a combination of frantic map reading and road signs - directly on to the A6 heading south. The weather is a foggy mistyness - impossible to see over about a half mile most of the day - wonderful effects of trees silouetted against white/gray. An uneventful day of mostly driving. A stop in Dijon about noon to see the L'Arquebuse Botanical Garden which dates to 1833. Perhaps 3-4 acres, but not really that interesting at this time of year as the best features are the 66 formal beds with 3,500 species of mostly annual or herbaceous botanical species on display in the plant families beds. A few nice trees - a Torreya nucifera, the oldest Cedrela sinensis in France, both redwood species, etc.

Everything in town is closed for the noon period from 12 until 2 and streets are totally deserted - they obviously take this noon break seriously. Wander around hunting for a museum which is supposed to be second best in France behind the Louvre - but never do find it. Find a bar/grill open and go in and order - very bothered by the smoke in the room. Seems everyone is smoking including all the women - with recent changes in the U.S., I forget about what a really smoke-filled room "feels" like in the lungs - ack! Head south and east after

wandering out of town - eventually back on a toll road again - finally into Mulhouse (who's ever heard of it?). Fairly large city with auto and train museums, zoo, etc. Get a hotel quickly and hunt for food to carry tomorrow on my bypass of Switzerland to avoid the astronomical food costs there - buy cheese and fruit in one store, quiches in another, drinks, etc. - settled in for the evening at 6:00 Read in my new Michelin guide on Greece - then switch to the computer to work.

Sunday - April 10, 1988. Mulhouse, France to Milan, Italy. Back on main road and head south entering Switzerland at Basel with a customs wave through. A fast pass through of Switzerland on a foggy day with trees silouetted against gray and many fine views - in about 10 AM and out by 1 PM! By Luzern and see the beautiful city wall and towers. As I get toward the southern Alps and go up in elevation I see snow on the trees and ground - and just before entering the 10 mile long tunnel drive through falling snow for about two miles. The tunnels are marvels - I wonder how they are vented and get a little claustrophobic thinking about an earthquake and being sealed inside. As I come down out of the Alps the season and climate changes quickly - mile by mile can see the trees begin to leaf out and begin flowering - apples, willows, etc. - nice to see. The sun comes out and the white snow-covered mountains are quite brilliant after the last several days of overcast and foggy days. Stop at the Italian border - get into a long bit of negotiation on gas coupons (which foreigners can use to buy gas at cheaper rates) which still ends up a mess. After I have changed all the money to get the coupons, the guy says I must use only foreign currency to buy them - exactly the reason I get so frustrated at the Italians as he knew I was changing money to buy them - grrrrr.

Head directly on into Milan. Go by a huge nursery dealing in specimen nursery stock - pity I can't get to it somehow to see - but no way off the Italian autostrada except at toll areas. On the way into Milan I cannot find any roads on my city map until I am directly in the center - wander around completely lost. Finally find a one star hotel - park and I go in and take it rather than hunt further. I'm wrecked emotionally and just lay down on the bed and collapse.

Get up about 4 and go to the main train station to see if I can find a place to get some credit card money as I am in very short supply and don't have enough to get through tomorrow. An enormous building of seemingly 30-40's style - rough but huge. The change office is closed and seems to not take my card anyway. Out and not sure what to do next - to a fast-food chain nearby and have a burger - the Italians have definitely not figured out this American phenomenon yet on the scale of the French or English - ugh! Go down into the subway and work awhile to figure it out - finally managing to go back to the center of the city for about 60 cents. The Castello Sforzesco and Milan Park (the largest park in Milan - designed by the architect Alemagna in 1893) are nearby and walk to see them - packed with people of all ages on a very beautiful Sunday afternoon - most just strolling in fashionable clothes - others listening to music, courting, playing sports, listening to music, etc. - wonderful atmosphere. Many fine trees in the park - weeping beech, bald cypress, cedars, yews, others. Get some popcorn which is great - see puppies playing everywhere.

Then down the main street toward the Duomo plaza - elegant, fashionable shops on both sides with people strolling in designer clothes - reminds me of a Milanese version of the Benson, N.C. Sunday teen cruising in pickup trucks - totally different yet totally the same. The square with the view of the Milan Cathedral is breathtaking (in spite of most of it filled with construction barriers) - the light is just right. Much impressed by the interior - the massive columns, the stained glass windows at the end of the cathedral which are quite different; the inlaid marble floor - marvel at the effort and philosophy required to achieve such effects over hundreds of years of work. Listen to the organ play for some time - as the minister begins to speak the reverb and echo gives strange effects (like the caves in the movie "Passage to India"). Out through the Galleria - the long axis is filled with scaffolding which prevents seeing the roof but the short axis is normal and shows the glory of the place. Now that I'm settled in the city with the car parked - really like Milan much more than expected - looking forward to tomorrow and the gardens of the Lake Maggiore area which should be in fine spring glory. Back to the hotel, settle in to work on my income taxes and finally stay with it though tempted to quit many times. Work until 11:30.

Monday - April 11, 1988. Italy - Milan to Lake Maggiore - Villa Taranto and Isola Bella - and Return. With the shutters closed no light comes in and oversleep a bit - not up until 8. So much for my idea of getting out of the city early before traffic. Leave about 9 and takes till 11 to get to the gardens area of Lake Maggiore that I want to see - longer than expected and would have been even longer had I not taken the express road (which I had not intended to do). The plantings of the towns and villas on the west shore amaze me - wonderful conifers, broadleaved evergreens, camellias (one the biggest I've seen nearly caused me to have a wreck - 35'H&W), and incredible magnolias. Decide to go all the way to Villa Taranto as it is the farthest from Milan and then work my way back.

Villa Taranto dates to 1931 and was created by Captain Neil McEacharn with the desire of creating a private "Italian Kew". Located on the northern shore of Lake Maggiore, the 50 acre property varies from water level to 1,100 feet in elevation. With an annual rainfall of 90 inches and a mild climate (Zone 8-9) - the gardens contain the finest collection of woody plants in southern Europe with over 20,000 species from all over the world. Spend about two and a half hours in heaven - and could use days. The magnolias are especially wonderful - an outstanding collection and at peak bloom. So many other incredible plants discovered as I poke around - far more than my previous visit.

Discover the specimen tree of *Emmenopterys henryi* (35') which was the first plant of this species to ever bloom (1971) outside China. It is covered with dried flowers from last year's bloom and I feel it would almost justify a trip back to see just it in bloom - supposedly in June/July. One of the world's most exotic and legendary woody plants which was introduced by Wilson in 1907. He described it as being "one of the most strikingly beautiful trees of the Chinese forests, with its flattish to pyramidal corymbs of white, rather large flowers and still larger white bracts". Although it has been in cultivation in Europe for many decades, other gardens had not flowered it before. It is noted for its long juvenile period (which the Chinese claim to be nearly 200 years in length) - but likely the delayed flowering is at least partially due to the lack of summer heat in the cooler climates of the British Isles where most specimens are located. Now

that a flowering specimen exists - I find myself wondering if scion wood of the adult form could be obtained and grafted to our young plant (now 6' tall) in the arboretum to bypass the long juvenile period (as is done with fruit trees and many other ornamentals - especially magnolias). In writing this for the newsletter I am very surprised to learn that another species also exists - but cannot find a reference giving its name - and apparently not in cultivation. Another fantasy goal! Another theoretically possibility which I have heard in speculation is whether our native *Pinckneya pubens* (in the same family, Rubiaceae and the closest equivalent to *Emmenopterys*) could possibly be hybridized to provide a tree with the size and foliage of the *Emmenopterys* and with the pink bracts of the *Pinckneya*. Sigh - there are so many thousands of fascinating and remarkable things yet to know and to be done with woody plants - oh that we could skim off just a billion or so dollars from the trillions being scammed and wasted in Washington.

Leave and head back at the afternoon break time when everything closes down. Stop at a port to take a boat to the garden island Isola Bella. Perhaps the most theatrically beautiful and spectacular of the Italian renaissance villas dating from the 1670's. It was inspired by the concept of the Hanging Gardens of Babylon and laid out as a series of terraces at various levels with exotic plantings. Self guiding tour of the palace - an enormous place with the lower floor stonework grottos probably the most interesting. I'm surprised to find a great variety of exotic plants planted for that interest and not for design interest - many fine things. The gardens are hard to "work" (photograph) with all the teens wandering around - takes me forever to get the parterre area without people in it. The many white peacocks give an especially exotic feel to the gardens. Enjoy the stay and the garden is indeed quite wonderful but would be so much better later in the summer with the annual color planted for that season. I am there also under a dark cloud - and just as I leave the island it passes and the most wonderful warm late afternoon light comes out and the island glows in the distance as my boat returns to shore.

Back to the car about 5:15 PM and head toward Milan with stops to photograph magnolias, camellias, and a large sheared *Magnolia grandiflora* trained as a perfect globe 35' in diameter. I am convinced that some of the world's finest specimen woody plants must exist in the public and private gardens here. Oh, for local assistance and some months to explore that possibility and document the plants. Traffic goes well - in fact not as crazy as I had expected, but am sure it will get worse and worse as I go south in the country. Also see a huge landscaping/garden center firm called Green Ideas - but no idea how to get to it from the autostrada. Back in the city - easy to the center but a real mess to get back to the hotel. Police get me out of one street I shouldn't be on, drive the Duomo Plaza (where cars are banned), etc. - but finally get back to the hotel about 7:00. Do computer work and finally another round on the taxes until 11 and think I am ready to copy results on clean forms and get them in the mail.

Tuesday - April 12, 1988. Milan, Italy - Taxes, Tracy Call. Sleep late again until 8 - sit and work on the taxes until 12:30. To the Galleria and make one of my rare calls back to Raleigh. Mostly bad news about my home construction - everything is a disaster and costs are escalating far beyond expectations. After hanging up I'm totally depressed - my financial situation is a nightmare and obvious there is no way I will be able to complete the year of study leave as planned - what to do? On to the post office to mail the taxes, letters and cards - another \$10. Rain is coming down harder now to the point I have to carry my camera under my jacket to keep from soaking it. Walk across town to the church where the Da Vinci "The Last Supper" fresco is - even though it is supposed to be hidden behind restoration scaffolding. Turns out the scaffolding is removed at the mural and can see it all - fuzzy and almost impressionistic at this point with the great deterioration. I am most impressed by the photos of the hall as it existed after the bombing in 1943 - amazing anything at all is left as the roof and two adjoining walls around the painting were totally destroyed in the war.

Back out into the rain - get a bit lost on the return and wander around until I come back out at the Duomo. In the cathedral and sit in the pews for a long time and admire the church and think about finances and life - all so complicated - so many crucial things ahead in the next few months and all I can do for the moment is to try to ride loose and let things unfold - it all seems out of my hands. Walk around the church - try to imagine what it would have looked like with the main pillars up before the roof and walls were in place - amazing structures. Under the Galleria canopy to look at the roof and outside of the Duomo - an incredible number of statues on the roof and as I look - smaller and smaller ones appear within the structure as I study it closer. Finally decide to head back to the hotel - raining so heavy it makes any sightseeing out of the question and I am thoroughly drenched. Stop to see a new interior courtyard landscape job being installed at the Campari Spa building - they have just unpacked and installed a new statue and workmen are doing last minute planting installation. I'm told dedication is tomorrow - the finest commercial landscape planting I've seen in Europe on this trip and wonderfully done with specimen plants up to 30' magnolias. Though I need to get on the computer and proceed with other work - the newsletter, letters, etc. I'm in depression avoidance with my problems and end up in bed and going to sleep at 7:00 - something of a new record I'm sure.

Wednesday - April 13, 1988. Italy - Milan to Venice to Padua. Again with the dark shutters I oversleep and not up until 9 - something like 14 hours of sleep - amazing! A hazy day but at least not raining. Fight traffic out through the city suburbs and finally on the toll road and heading east. Originally planned to stop in Verona to see a garden but in my down mood not up to fighting city and driving so just pass by. The drive mostly through flat plains with fruit trees in early bloom and endless grapes; varying from the flat plains to intermittent hills rising up - and to the north major hills and mountains in the distance. Get off at Padua with expensive toll total - lost at first but finally into town - drive around quite a bit - to 8 different hotels either filled or too expensive (Padua is the "affordable" alternative hotel city to impossible Venice nearby) - finally get a room in the Hotel Buenos Aires which turns out to be perhaps my favorite room of the trip - very high ceiling, wooden parquet floor, simple furniture and lines - light, airy and attractive.

Get back in car and wind way out of town to the autostrada to head to Venice. Only 15 miles away in fast trip but on the other end a long hunt for the parking lot - two wrong trips with turnarounds. Take the boat taxi for a slow scenic trip to San Marco Plaza. I can't find the Guggenheim museum I'm hunting on the map - but see it from the boat to find later. A beautiful day - hazy sun and perfect temperature. Off the boat and into the plaza - then into the Basilica di San Marco. Byzantine art and architecture are not really to my taste but it is indeed magnificent with the interior of gold mosaic tile, amazing mosaics in the floor which undulates from centuries of settling. Pay to see the gold treasury and to go up to the roof to see the bronze horses and go out on the roof to overlook the plaza - certainly one of the world's greatest urban spaces.

Walk to see the Guggenheim collection winding through streets and plazas by elegant shops of all kinds. Go in a particularly fine glass shop with contemporary work - magnificent but impossibly expensive. Finally to the Guggenheim - I like the door of woven wire pieces with glass imbedded in the metal. A beautiful courtyard garden with sculpture. The house is small but filled with an extraordinary collection of "name" painters. Rooms of Mondrians, Picassos, De Kroonings, a Calder bed headboard, many, many others. The infamous canal courtyard sculpture is as audacious as its reputation. Back to Padua with several mistaken roads and turnarounds - and a total cost of roughly \$19 for gas, tolls, and parking vs. the \$7 it would have been by train. I'm tired from miles of walking and though I intend to take a bath and work on the computer as there is a great table and work space - end up just going to sleep after reading the paper. What great night life I'm having in exotic Europe!

Thursday - April 14, 1988. Padua, Italy. It is wonderful to finally get completely bathed for the first time in 5 days. Hair washed, dried straight, and combed - my ever longer hair and mustache look like a massive mane and almost decent for a change today. Happy to discover the noted University of Padua Botanical Garden I have come to see is just a block from the hotel - which makes it even more desirable. Garden historians consider this garden founded in 1545 as the oldest existing botanical garden in the world. It retains all the original structures and design layout with 5 acres and over 6,000 species of plants. Don't stay long as I want to "work" it in detail later after running errands. Walk uptown and finally find a bank which will do a card cash advance - takes 5 people working in great commotion to finally handle it. Look at shops on the way back - surprisingly elegant and fine shops for a University town - though much industry in the area also - furniture, oriental rugs, fine clothes everywhere.

To the garden again and spend even more time than expected. Years ago on a first visit - I typically sandwiched a madcap race through the garden in about 15 minutes in order to "see it" between trains. The garden is really very fine - much better than I remembered or expected - wonderful collections and obviously very well maintained with about 10 gardeners working in the garden today. The plant introductions area is fascinating showing various foreign plants which were first grown in Europe in this most important garden and their dates of introduction; the lilac, *Syringa vulgaris* (1565), sunflower (1568), potato (1590), etc. - with special fascination of a plant of American poison ivy (1625)!. Had not remembered the arboretum on the outside of the circular wall which is better than I would have expected. The oldest plant in the garden is a *Vitex agnus-castus* planted in 1550. There is a rock garden, greenhouse displays (including the famous 3 story high hexagonal greenhouse containing the Goethe palm planted in 1786), medicinal and aquatic plants. I am particularly pleased to see the garden is more than a historical relic with obvious heavy use by not only the university - but with many school children groups going through. Like kids everywhere, they are fascinated by the Venus flytraps from North Carolina as the leaves close when touched by the teacher in demonstration. I sit and reflect on such gardens and feel that this oldest botanical garden remarkably would be a superb model to use for a university teaching botanical garden even today - assuming there were still any departments of botany in the U.S. today in which students actually studied living plants (a doubtful assumption).

Back to the room and finally break out the computer and do recent days - a lot of backlog with all the events. Need to get onto working on the newsletter but somehow suspect there will be a break and little more done for the day. Finally out and find a grocery store to stock up on items. Restaurant food has been so expensive and portions so small it feels like it has been forever since I've been able to have a decent meal with enough food to really fill up - so I go across the street to the butcher shop and buy a whole broiled chicken to eat for dinner. Back to the room and eat the entire thing in a fast sitting and feels great! Burp.

Friday - April 15, 1988. Italy - Padua to Pisa to Florence. Head south to Bologna. Beautiful day and weather - make good time on the autostrada though passed by Italian drivers in Porsches flashing lights for going so slow. Fuel up - more expensive for gas in Italy than have experienced before - takes about \$45 to fill the 9 gallon tank even with the discount coupons. Scenery at first is the flat plains of fruit tree orchards in bloom with vineyards, punctuated by the hills which rise from the plain - usually topped by impressive villas. Many large farm buildings of brick with huge arches in them. At Bologna there is an immense church on the highest hill in the area overlooking the city which is built at the edge of the range of hills rising from the plains. The drive south through the mountains is beautiful - occasionally getting a glimpse of a mountain to the west topped with snow. I occasionally get close enough to the landscape to see that there are yellow primroses blooming in the woods - curious about what flowers might be blooming on various rocky cliffs and peaks.

To Florence and miss the exit for the road to Pisa but quickly circle through the parking lot of a road stop restaurant there and on the road again. Go through a huge and wonderful wholesale production nursery district - very tempting to stop and photograph from the autostrada - but decide I'll wait and try it Sunday morning when hopefully there will be less traffic and problems. Particularly impressed with the narrowly columnar *Magnolia grandiflora* in production - through the day debate whether shape is genetic (eager to bring this cultivar back if it is) or pruning - probably some of both. The autostrada tolls are so expensive - \$30 for the roads this morning + the gas - ugh!

Into Pisa and no problem to find the famed Leaning Tower - it totally dominates the low skyline of this ancient city. The large lawn area around the three historic buildings is green, lush, and beautiful - and covered with hundreds of tourists and zillions of tacky gift stands which is no surprise. I am a bit surprised by the crowds at this off-season time. To the Pisa Botanic Garden which gets none of the tourist visitors though only two blocks from the tower where thousands are milling. The Pisa and Padua gardens date to the same period with rival claims as to which is truly the oldest European botanical garden. However, unlike the Padua garden, the Pisa garden obviously gets very little support and is very little used. Although a larger garden with nearly 8 acres, the collections are limited in extent and interest. The arboretum section of the garden has few plants, is weedy and has little maintenance. The older taxonomic section is a little more interesting - most amazed by a very old and large *Quercus virginiana* and a very large *Euonymus* tree (18"D, 40'H).

Back to the Leaning Tower - had not planned to go up to the top but want a shot of the botanic garden from it for future lectures on garden history. Turns out a memorable but not particularly pleasant experience. I'm surprised to find it very frightening to me and continually feel that after centuries of standing it is going to fall when I'm on it. The worn marble steps testify to the centuries of visitors and the slippery surfaces seem dangerous considering the slope and there are no barriers to falling off - it would never pass safety code standards in the U.S. and tourists would certainly be prohibited in visiting it as it is.

Head back toward Florence via a winding, slow country road instead of the autostrada. When I get into the suburban areas of Florence the signs sort of fail and I drive around and around trying to find my way across the river and into town. Finally get across the river and still have a difficult time getting into the center area near the train station - surprisingly poorly signposted for such a major international tourist destination. Then more winding around downtown trying to find a hotel. After walking blocks and blocks looking at many places (which are all too expensive) finally find a place with reasonable prices and perhaps the biggest room I've had to date - 20' X 30' with 12' ceilings. A huge mirrored cabinet sits at one side of the room which feels like a mime troupe may appear out of it at any moment; parquet floors; and two large windows overlooking the street with both interior and exterior shutters. Explore the city a bit; go by the Duomo, then to the plaza with the Michelangelo David (copy) and Uffizi gallery; then over the Ponte Vecchio bridge with all the jewelry stores; look around shops there a bit & finally back to the hotel.

Saturday - April 16, 1988. Italy - Florence - Uffizi, Museum of Science. First to the tourist office where I get maps of the city and a list of gardens to visit - go on over to the Uffizi Art Museum with a big line out front and full of school kids. The two long galleries with painted ceilings and statuary are most impressive and the collections are outstanding - although 10-17th century art and the endless church art are not my favorite styles. A magnificent mosaic table; the Da Vinci painting; the room of Botticelli paintings; the intense coloration of the restored works; the large galleries with beam ceilings; and the almost tossed off room of assorted Rubens, El Grecos, and Rembrants at the end are major memories. Look at the archeological work progressing in the square with a sign of apology by the city for disruptions to visiting tourists.

To the little-visited History of Science Museum - most interesting and only wish there were some signs in English to help me. I find most intriguing the middle finger of Galileo mounted upraised in a glass display bottle - somehow appropriate to an image of making a symbolic rude gesture to those who so discounted his science and persecuted him. Many fine displays and take many photos. Out and start to go to the Michelangelo Plaza - but the air is hazy and not the best time. Wander at random awhile - finally head to the Museum of Botany - but it is closed when I finally get to it, and also the botanical garden is closed. Settle in and read the newspaper - the U. S. stock market is crashing again and the dollar dropped another 2% yesterday - how wonderful! About 5 PM church bells all over town begin to ring - go on and on and on - at first pleasant and enjoyable - but eventually wearing on the nerves. I work on the log - getting caught up to date by 6.

Decide I want to hike over to Michelangelo Piazza on the hill across the river (the view of Florence) and photograph the town in the evening sun - running a little late to get the light at the best and a longer hike than I thought. Work my way up the hill - enjoying the abundant redbud, *Cercis siliquastrum*, in bloom on the hillside - much genetic variability which would be fun to look at more fully throughout the population. The light is a little too far gone by the time I get to the top but still nice. Hunting also for the Iris garden noted in my guide - wander all over the hilltop and finally find it off the side to the south - not accessible and of course the plants not in bloom yet anyway. Back down the hill, across the Ponte Vecchio bridge where Krishna's are chanting - must go over very well in a strongly Catholic country? Go back via a street of very exclusive shops discovered today with "floral landscape constructions" along the street - flowers, turf and shrubs arranged by the stores. The Cartier store of glass in an old arched building is spectacular.

Sunday - April 17, 1988. Italy - Florence to Lucca and Return. Head west out of town - not sure of the roads - on the autostrada and into the nursery district - make various stops and I run up and down the road and get shots. Now can see the tall, narrowly columnar *Magnolia grandiflora* plants are created completely by heavy shearing. A magnificent nursery district with large quantities of field-grown specimen plants of amazing size - particularly of conifers and magnolias. Would love to tour it with a knowledgeable guide knowing the firms. Stop in Collodi to visit the Villa Garzoni gardens designed by Diodati in the 1600's. A dramatic formal renaissance landscape garden with parterres of flowers and a typical hillside, stairwells, and water cascades Italian garden. Circle around the house nearby where the Pinocchio story originated and then on to Lucca.

In through the city wall and wander around the narrow streets and park near the cathedral in center of town. Go to the medieval wall surrounding the city - a wonderful public park today with paths on the wall and beautiful trees of many kinds. A short walk takes me to the 5 acre Lucca Municipal Botanical Garden I want to see for its noted old specimens of rare trees planted from 1820 when the garden was founded. To my dismay it does not open today so will miss it after all this effort. Can walk on the rampart and look directly down into it - but viewing the superb plants simply makes me want to get into it even more. Intrigued by a distant view of a 7 story tower in the

center of the town with pine trees growing on the top - but down in the narrow winding streets I cannot locate it to explore. See *Lagerstroemia indica* standards and *Magnolia kobus* interplanted as street trees on one street. Head back toward Florence - stopping to photo some of the things of interest I saw on the way out - finally back on the autostrada and back to the hotel.

Monday - April 18, 1988. Italy - Florence to Viterbo; Parc de Monstroi, Villa Lante. Across town to see the University of Florence Botanical Garden I have been waiting two days to see. They obviously have no interest or concern in serving public visitors by opening for only 4 hours on Monday, Wednesday, and Friday mornings. When I get there, they have closed the garden to visitors today as they are working on the bathroom floor in the administration building and don't want any visitors to bother the workmen in the main corridor. Ten feet away down an open corridor I can see the garden - "talk" to several staff people and plead my case (none understand English) which great gestures and pleading - but all to no avail and I am violently outraged! Wasted two days sitting around to get into the garden - not a good record in the last 24 hours in missing 2 gardens with messed up hours. Can't wait another two days (when it could be closed again) so I miss another garden of 6 acres with 6,000 species of plants. Italian scheduling drives me crazy!

Make a good direct exit from the city and on to the autostrada toward Rome. Stop later for a gas stop - take time to wash all the windows inside and out - still carrying the pine resin from the parking lot at Sheffield Park in England which seems like a permanent epoxy and non-removable. On down the road - the yellow mustard blooming is beautiful - misty air with various levels of hills and trees make wonderful vistas. Picturesque villages perch on hilltops on a scenic drive through the hills to Lake Bosan. Much summer camping in the area on the lake - see real estate signs for German investors. Enjoy the regional story of Est, Est, Est (source of the name of so many Italian restaurants in the U.S.) - about a German who liked and drank so much of the local superb wine that he died. Then to Viterbo to see THE Italian renaissance garden - Villa Lante - wind around the medieval city in a maze of very narrow streets without seeing any signs or markers to the garden - park and walk but can't find either the garden or any hotels (well - two, but much too expensive) or pensiones.

Finally decide to head on and find Parco dei Monstroi, another garden on my list in the nearby town of Bomarzo. The "Park of the Monsters" is a fair drive out and I'm dismayed to find it is handled more as an amusement park than a garden - with animals, tractors, and other things mostly for school children. The "garden" was created in the late 1500's as a sacred wood with numerous very strange exotic monsters and structures carved directly from massive stone outcroppings. The bizarre stone carvings are unique and fascinating but sadly fenced off with wire fences which detract from them and the park is heavily used and rundown .

Head back to town trying to see where I lost the signs to Villa Lante and encounter it on the outskirts within two blocks of where I passed earlier. Stop just to check things out and discover to my amazement that it is open when all my books say it is closed on Monday - could have done it earlier and been on my way to Rome. Check the office and I think he tells me it closes in 15 minutes. The light is good so I run back to the car to get my camera, buy a ticket and dash to join the last tour of the garden. The garden is stunning - much better than I really expected and I see why it is considered the classic Italian garden - wonderful. Only 4 of us on the tour and the guide speaks only Italian. The lowest level consists of 4 magnificent parterres with immaculate maintenance. Rising from this level are three terraces with many architectural features for strolling and social entertainment with fountains and cascades of water connecting the levels. I'm running around and snapping shots like crazy - get up to the top of the garden at the top terrace and hit the last shot on the roll in the camera. Take the film out and start to put another roll in - when I open the canister I find it is already shot - I'm out of film! Horrified - but luckily we are at the end of the tour and I got most of the things I would have wanted - thank heavens. Interesting paintings on the walls of one of the houses showing the appearance of Villa d'Este and Villa Lante at the time of their creation.

A little early to stop for night, yet don't want to attack Rome late in evening so decide to drive south and stop somewhere along the way. A long drive and hunt through many villages (decorated with blue and white flowers and banners for some religious celebration) which turns up absolutely no rooms - and haven't really had any food either today - beginning to look like I may get caught out for the first time on the trip. As I'm about to get back on the Rome autostrada to tackle that - find a hotel by the highway (much above my budget) but concerned about lack of any other places so I take it. Quickly drive to nearby village to get groceries to avoid a restaurant after this high cost - drive and drive and again about to give up when I find a tiny grocery store about to close. The selection is very limited - but buy everything edible (two whole aisles are pasta - hard to eat uncooked).

After picnicking in my room, I grab the computer and go down to the hotel lobby to work - the machine is an automatic magnet for all the curious kids and many of the adults who pass through the lobby. One little girl literally almost crawls all over me - peering into my face close up, over my back, etc. No inhibitions there at all. The most expensive room I have ever stayed in all of my travels and ironically nothing special - small, absolutely no view (a window overlooking the roof and a wall a few feet away). The only pluses are it was available when I desperately needed it (though I'm almost wishing I had taken the agony of late hunting in Rome), and they accept the magic money card. This seems an ill-fated day from the beginning - difficult to change money, no mail, the garden closed off-schedule, a parking ticket, no food for lunch, no hotel - then one too expensive - yes I'm very tired of this traveling - why don't I just pack it in and give up and go home?? Very tempting - but of course as soon as I returned there would begin to be regrets that I was there instead of traveling. And certainly Villa Lante and Parc de Monstroi are memorable and significant information for future teaching and lectures. Have the only TV of this Europe continent swing - watch the movie "The Big Chill" (in Italian with no subtitles) and to bed about 11.

Tuesday - April 19, 1988. Rome, Italy. Before leaving - drive back up the hill and photograph large masses of native *Arum italicum* in flower by the road. On the autostrada for an hour and half drive to Rome. Stop and get gas before the plunge - and begin to thread my way in reading 3 or 4 maps simultaneously to try to keep track of progress. I'm freaked out by what I've read and heard about Rome

traffic. See a huge garden center I would love to stop at - but by it too quickly. In town make numerous mistakes - one sends me into a tunnel and out in an entirely unexpected place My worry increases as cars are double stacked parked (side by side) and haven't seen a single available parking place since entering the city. Get to the street recommended in Let's Go - hunt through several pensiones and I'm won over by an English sign and cartoons on a door offering help and sympathy - and when the English lady comes to the door I am ready to stay no matter what. Only one room left - pleased that I'll get breakfast for the first time in Italy. Also appealing is her explanation of the parking situation where a doorman will juggle cars in the street (parked three deep here!) until he can get it to the curb where I can leave it during my stay - amazing. Postcards and many notes from previous residents about what to do and not do in Rome line several bulletin boards in the hallway and the lady gives me many suggestions - including watching out for the gypsy children who slit pockets with razor blades and can instantly strip you of valuables without any awareness (covered in a U.S. 60 Minutes TV profile).

To the Rome National Museum which is nearby - huge impressive building in old baths but terribly disappointing - very little on display except for acres of very poor fragments. A fine discus thrower and a Pompei type room of fresco painting which are superb - but little else for the size and reputation of the place. On to the Roman forum - decide against a formal tour and just get photos from different vantage points. I end up at the Campidoglio and suddenly discover my notebook is gone - panic time. Quickly retrace my steps and luckily find it still on a railing where I left it. Would have been disaster to lose all those records. Exhausted from miles of walking - buy drinks, baked potatoes and a roasted chicken - back to the room, eat till stuffed, read, computer, bed.

Wednesday - April 20, 1988. Italy - Rome - Vatican. Rolls, hardboiled eggs, and great coffee for breakfast - all makes this place quite a bargain when figured into the rental rate of 42,000 L per day. Head out with a solitary goal of getting photographs of the Vatican Garden for my garden history teaching - and whatever else happens. Long walk - concerned about misty cloudy weather and worrying about possible rain on me and the camera - and as I approach the Vatican a slight rain is starting. Find the plaza blocked off and full of chairs. As I check the control office about a garden visit I learn that on Wednesdays the Pope always has an audience and the Vatican is closed and there are no garden visits for the day - foiled for the third time in three days - getting to be really frustrating. But a kind English speaking Swiss Guard explains the church will open after the audience about 12. So I figure I can do the Vatican museums - then shoot the garden from the roof and that will do it.

Very much enjoy the museums - apparently when I was here the first time years ago - I did the fast "A" trip (four options are given to visitors) just to see the Sistine Chapel - this time I take in everything on the "D" tour and takes three hours. Incredible classic treasures from centuries of commissions and acquisitions. Frustrated in photography by huge blocks of German tourists with guides stopping them in clumps around the best sculptures for long detailed discussions - Germans are THOROUGH!. Enjoy the Etruscan works; the Greek sculpture; the long galleries of maps and tapestries; get some good garden shots out the windows. Finally into the Sistine Chapel where they are about half through the noted (and somewhat controversial in the art world) ceiling restoration of the Michaelangelo frescos - now working on the "Creation of Adam" panel. The contrast between the restored and unrestored sections is astounding - darkness next to brilliance.

Out and back to the plaza and the papal audience is still going on though after 12. Move into the seats area and listen to the proceedings - a blessing is given in many languages and announcement of groups from various areas who stand up and wave - goes on and on and on. To do this day after day; year after year for decades - would take an extremely patient person. Later as the service finally ends about 1:00 - crowds stay up at the front so I move up there and see the Pope is going around greeting various people - work my way slowly up by stepping from chair to chair as others shift - and finally just one person back from the fence. As he comes by I reach out and get a touch of the hand by him as he sweeps the audience - amazing unexpected event of the day. Again I think about and wonder about the life he leads - glamorous and important - but how unbearable also. He must have physically touched more people than any one man in history - hundreds of thousands - a million? Finally it all ends (constant photographic record by his staff of everything) and he gets into his Mercedes and leaves.

In a few minutes the gates to the church open and I am the first one in - have the whole nave to myself for a few seconds and it is a stunning experience - so enormous and everything so perfectly in scale. Go to see the Pieta - again the only person. Walk through the church marveling at the power and wealth it represents in what it took to create it - could not be replaced with billions today - and my constant thought of madmen with nuclear weapons comes to mind again - will it survive our insane era? Hunt for the roof entrance and finally find it - take the elevator up (thankfully after I struggle with the climb after that alone) to the roof. Then climb up to the top of the dome - the spiral walk inside the curving dome is quite an experience and I have my fear of heights and falling again. A great experience though to be on top - wonderful views in spite of the poor visibility and hopefully some good shots of the Vatican Gardens. They were designed by Bramante in 1506 and are considered the epoch-making garden which began the age of the Renaissance gardens as a break from earlier Medieval gardens. Back down through the dome with an interesting twist given as you come back down a totally different way and are not really aware of it until you hit bottom. Now the church is full of hordes of people. Decide to go by the Pantheon - but disappointed it is closed as the guide book said it was open until near dark - again who knows when the Romans will open or close anything? Continually frustrating. On to the Trevi Fountain where I admire the fountain and toss in coins to come back to Rome again.

Thursday - April 21, 1988. Italy - Rome to Naples to Salerno. In for breakfast at 7:45. The owner (an actor at one time with various pictures on the wall) is singing and carrying on with all the guests at breakfast today . After another long bank battle, manage to get out of Rome relatively painlessly with only one turn not quite to my planning. On the autostrada heading south to Naples by 10 - the drive goes well and fast - stop just before Naples to get gas and use up the last of the coupons - a lucky guess on which book to use and will only need one cash fillup to get out of the country now. See Mt. Vesuvius ahead in the misty fog; strange trellised trees/vines? on wires

strung between sycamore trees that I can't identify. Plunge into Naples and turns out a different road than I thought and get dumped into the city near the train station. The city is as awful as I expected - traffic the worst I've have seen in Italy - horns and crowded - poor or no road signs - poverty and ugliness. Finally maneuver around and get to the Naples National Museum which is the goal for the day. Parking is horrible and near impossible.

The museum is noted as having the finest collection of Greek and Roman art in the world and I have long dreamed of this visit. Like many long-anticipated experiences - now a disappointment to me in what I had it built up into in my mind. The collections are of course superb - but like Spain the poverty and rundown condition of the museum detracts. Nothing is labeled or interpreted - much of the museum seems closed off for renovations or just lack of ability to handle visitors there. There is one area of contemporary display techniques on the Naples history section; and they are building another downstairs for the future. The most impressive items to me are the fresco segments collection from Pompei and Herculaneum - by far the finest I've seen in quality with incredible color and detail. Also, some stunning mosaic work - tiny pieces on a huge scale. The two rooms of statuary from the Villa de Papri (basis of the Getty Museum in California) are magnificent also. There is such irony in the unreality of the whole place - overflowing with treasures so immensely valuable in today's art market that an individual piece could be sold for enough money to completely build a modern museum and maintain it - and yet the collection remains with open windows which results in no temperature control, erosion from the auto fumes outside, and dusty floors.

Manage to get out of the city without too much trouble. Go by a botanical garden - but I'm just not in the mood to fight the hassle to try to stop - and really too tropical to be of much interest to me anyway. Heading to Herculaneum - which turns out to not be as easy to find as expected considering the fame of the place. Don't see an exit or any signs for the ruins - and end up getting off at the Pompei exit which is past Herculaneum according to the map. A guy pulls me off into his parking lot - and I explain I don't want Pompei and he says I must go back on the autostrada 20 km. Get back on - and take the first exit off and wander around a town to the waterfront and finally back to the autostrada. During all the wandering I discover in the Michelin guide that the Italian spelling of Herculaneum is Ercolana. Find it on the map and then get there with no problem. The parking lot turns out to be at the police station which seems a good idea in this area and happy to pay for that security.

In to the site - small and formally arranged. Enjoy it much more than expected - quite wonderful. Unlike Pompei which was buried in ashes from the eruption of Mt. Vesuvius at the same time in 79AD, Herculaneum was buried in a massive mud flow which hardened - making excavation of the site much more difficult - yet at the same time preserving things amazingly well. Wander up streets, through several story buildings with original wood framing intact, through the markets, public baths, etc. - fascinating. Get many photos of details which will be good to use in my garden history lectures in the future. A challenge to photograph with the tour groups there and about the time I leave it gets worse with several school groups coming through - painful to watch the kids pound on murals, scrape down walls, and clown around with such priceless things. And also painful to see how little the government has done in handling the ruins for visitors - interpretation, maintenance, etc. What could be done here with something of a Williamsburg approach!

Head on south via the autostrada to Salerno - area covered with greenhouses (vegetables and cut flowers), vineyards, and fruit production on what little land exists that is not in factories or housing. Get off into Salerno - I'm expecting many hotels and tourist facilities in what I imagine is a major tourist area - a long frustrating evening before finally getting a place. Go for a walk to the beach by plantings of *Pittosporum tobira* which are the finest I've ever seen - tree-form plants with 6-8" trunks, 8-14' high - spectacular and I want to photograph them in the morning.

Friday - April 22, 1988. Salerno, Italy to Greece. Get out on the road and realize I was going to photo the *Pittosporum* - decide not to try to get the car turned around and across the heavy traffic. Will probably always regret it as the plants were spectacular and will probably not see their equal again (True - "Raulston's Law of Travel" kicks in again). Take the beach drive south to Paestrum - easy drive of about 25 miles. Encounter an incredible block of hundred of acres of plastic greenhouses with mostly strawberries under them. Also many artichokes in area with the usual fruit crops. The temples of Paestrum are considered the finest remaining Greek buildings - truly magnificent and under just the right conditions - feeling good; the weather and light are perfect; redbuds on the site are in full bloom; the site is almost empty of tourists; and they are wonderful. A favorite spot of mine in my travels - so many thoughts and images of what this must have been like - and what it could be with better interpretation. I think how well the English have handled the minimal remains of Fishbourne - and how little has been done here with the finest Greek temple in existence - sad.

Look at several possibilities on how to get across the Italian peninsula to Brindisi on the east coast for the ferry to Greece. Decide to do a slow route across the mountains to get to a freeway. The drive is slow - nearly 4 hours to drive perhaps 60 miles to San Rufo as the crow flies - but a very pleasant drive through the country. Stop several times to look at wildflowers on the roadside - wonderful things and I could use a day here easily to hike up the rocky mountains. But see *Helleborus foetidus*, *Anemone blanda*, many others. Cross over the autostrada and climb another mountain - see a spectacular series of bridges - one of which crosses a valley with a tunnel piercing a hill and emerging into another bridge. Finally on a major road heading to the coast - a wide road but not a very good one with poorly banked and uneven surface. Brilliant yellow flowers in masses on the road - but no good places to pull off for photos; later red poppies as well. Then on the coastal road to Taranto - with intense horticultural vegetable and fruit production and some of the finest olive trees I've seen.

Get to Brindisi about 5:30. Stop at the first travel agent into town and book my ferry - easily and quickly - and especially happy to have them accept plastic again. Stop to fill with gas; to the Fragline office where I get boarding passes for me and the car; to the police station for passport work; grocery shop for supplies and change \$100 into Greek money to have a little to work with over the weekend.

Finally get on the ship fairly quickly at about 7:30. Watch people and vehicles load from seat on the rear deck - eat chocolate and peanuts. Gets quite cold out and the boat is over a half hour late in departing. Down to my room where there is a little corner table which works perfectly as a typing desk to my surprise. Tomorrow to Greece for my first visit - strange it has taken me so many years to get here when I have had so many visits to Europe and have had so many people recommend it to me so highly.

Saturday - April 23, 1988. Arrival in Greece to Vikos Canyon, Ioannina, Dodona Theatre to Menidion. A good nights sleep with sailing on a perfectly smooth sea. They bang on the door to retrieve the room key before we get to Corfu for some reason. I get up and go out hoping to catch a glimpse of the Albanian coast which is nearby - but we are already just past that area according to the map - and it is barely light enough to see the harbor - watch the docking and people getting off and go back to the room for a little more sleep. Again they get me up early for the arrival at Igumenitsa. A misty morning with shadowy outline of mountains - a line of trees extending out into the sea. Very beautiful with the sun leaving a band of shimmering light in the water. More trees on the hillsides than expected - the port beautiful (from a misty distance) with background of mountains behind.

Out and through customs faster than expected - just one form to fill out on the car. It is 7:30 and the town is closed up - no place to exchange money so head on and make driving time in the morning. Just out of town hit perhaps the finest view of the trip but pass up photographing it unfortunately - beautiful mountains with one almost vertical and jagged on top - misty - trees perfectly arranged in the foreground - a wonderful entrance feeling to the country. As I head up into the mountains on the drive to Ioannina I'm excited by the redbuds - very common in the valleys and roadside and in full bloom. As I go up the mountains - get above the clouds and morning fog for spectacular views of mountains (some with snow to my surprise).

On into the Ioannina area and take a bypass north of the city and up the side of another mountain for a drive to the Vikos Gorge area - beautiful drive and the road gets narrower and poorer the further I go and higher I get. Into a region of grey stone buildings with stone shingles made from the thin layers of stone in the area - fantastic geological formations and many wildflowers including masses of *Helleborus orientalis*. To the end of the road - a stone path goes from the end of the road and disappears around the mountain in the distance. Park and walk the path - with stones vertically set at first with difficult walking - later horizontally laid. From the path there is a near vertical drop of over 3,000 feet into the canyon and the height is terrifying to me - cling to the wall and afraid of slipping. Only a short distance and it becomes apparent I took the wrong direction and missed the monastery and its trails back in the last town - but still spectacular and wonderful - much like the Black Canyon of the Gunnison in Colorado except with a much more vegetation on the walls.

Back to Ioannina - stopping to photograph fields of wild purple geraniums from the ridge, and later from the ground - spectacular meadows of white, yellow, pink, and purple flowers (best of trip). Into town - have moussaka and a Greek salad of tomatoes, cheese, etc. - excellent. Debate stopping at a hotel but decide it is too early in the day to stop. Head south of the city to the site of Dodona - one of the largest and finest Greek theatres in existence. Get to the area easily but then a hard time finding it - wind around tiny roads looking at Greek priests in black robes and burros before turning around and finding it - earlier drove by huge parking lot where people come for summer performances - but no signs at all announcing the place. It is spectacular with views of distant mountains from the theater - deserted with the sound of a cuckoo bird singing in the distance while there - many wildflowers. Shows clearly the ancient Greek mastery of architecture and site selection.

Leave and back to the road - head south to Arta. Stop at the Old Arta Bridge where the architect supposedly buried his wife in the foundation - arches of varying sizes make up an undulating bridge over the river. Come to an inland arm of the sea and find a little hotel on the beach in Menidion. Go out and fill the car with gas not knowing if anything will be open on Sunday and buy groceries for the evening meal.

Sunday - April 24, 1988. Greece - Menidion, cross to Peloponese, Olympia to Kalamata. Head south hoping that there is a ferry across a narrow strait to the Peloponese peninsula which will save an 8 hour drive. Much citrus in area - less scenic area than yesterday. Go by an artificial reservoir with a town sign with an X across it indicating it is under the water of the lake and no longer exists. Into Antipion where I'm guessing there is a ferry and thankfully there is - well set up for rapid movement of people and I drive right on the ferry and pay on board. The trip across the strait is quick - just barely time to get a cup of coffee to enjoy on the boat roof as the cafeteria is cloudy with heavy smoke. On the other side a quick drive of a few minutes to Patrai (typical of problems with interpretation of Greek signs - every book and atlas I have has a different phonetic spelling of the name - Patrai, Patre, Patras, Patria) - the main port city for sailings to Italy, etc. Very hopeful there will be money changers there as there were on the other end in Brindisi as I have just enough for gas and a room tonight and will be out. A busy port with hotels, many shops and restaurants, travel agents, etc. - but not a single money change shop and the banks are all closed on a Sunday so I head on.

Several hours driving through mainly agricultural flat land - much poly tube tunnel starting of vegetables and strawberries, with larger poly houses for tomatoes, etc. On to Olympia to see the original site of the Olympic Games for 1,200 years. I'm very excited by the groves of redbuds in full bloom on the grounds - the best I've seen anywhere. See the sculpture studio, the "hotel" with a circular pool garden in the center atrium; the temple, the stadium, etc. Very much enjoy the visit - what a trip it would be to "TV time travel" back to the past to see one of the original Olympics. Go on to the museum which houses things from the site - a fine illustration of the Greek excellence in buildings and total absence of landscape plant useage to be seen throughout the Greece during my visit. A wonderful portico and stone courtyard entrance - but all plantings around the building are a disaster. Inside spaces are handled beautifully - the central room with the statuary fragments reconstruction of the temple of Zeus pediments is magnificent. Most noted item in the collection is the original Praxiteles statue of Hermes and quite magnificent.

A bit nervous as the Olympic site and museum were more than expected and now have very little money left and unsure whether there will be any banks in the area ahead which can provide money. As I go along south in random reading of the Michelin Guide I find a tiny notice about a house built in the shape of a horse and in checking find it is just 15 miles off the route so detour and it becomes a highlight of the tour - the Fairy Castle of Dreams with the giant horse building, with a 25' King and Queen nearby. An amazing fantasy - almost abandoned in appearance - somewhat crude like a child would do it - and unfinished - many photos. On south to Kalamata. A major commercial center for the agricultural region with a central business district - but certainly not a tourist town and I drive and drive without finding any hotels or signs to any. Finally give up and head further south - just outside town there is a beach district with numerous hotels. The first one is full - but get a room at the second. Again a fine balcony and beautiful view up the coast to Kalamata in the distance with mountains to the right. Sometime in the night a bug crawls in my ear and gets stuck and I awake with the buzzing as it tries to escape - trying to get it out with my finger gets it stuck in the wax where it apparently finally dies slowly - buzzing awhile, then silent, then buzzing - drives me crazy for the next hour.

Monday - April 25, 1988. Greece - Kalamata to Mani Peninsula. Into town and I go in a bank to try to get money. A long stay going through three long lines - many elderly in line cashing checks or converting money sent by relatives in the U.S. - see checks from Atlanta and Kentucky among others. Head south to the Mani peninsula with deserted stone towers on isolated coastal areas. As I go south it gets drier and the vegetation more sparse - trees disappear but still many herbaceous wildflowers at this spring time of year. Come to Diros Bay with the Glifada Cave highly recommended by the guide as "one of the most spectacular natural sights in Greece" - and stop. It is a strange place in that I've encountered Greeks everywhere who speak English - but at this very heavily touristed place - not a soul can (or will) - give any information at all in English. It finally comes time to do the cave tour - it turns out four tourists go in a small boat rowed by a guide. I end up at the front of the boat with an unimpeded view of the caves which is wonderful. The caves are far more beautiful and interesting than I expected and enjoy the tour of a little over a mile - the very fine and delicate stalagmites are different than those I've seen before - and the journey by boat at times ducking to get under tight areas is quite special.

Head on - getting into the Mani Towers area (square stone towers 1-4 stories high built many centuries ago by fiercely independent villagers). Decide to go all the way to the peninsula tip - and work my way back and decide later about getting a room for the night. By Vathia where the greatest concentration of towers is located - just south of there on the connecting link to the final peninsula just above Porto Kagio - find the perfect house at the peak of a ridge with ocean views both east and west with mountains to the north and south - all alone - 3 stories high with associated structures. First explore a little development of summer houses nearby - I find to my amazement a colony of *Arisaema ringens* near a house under a fig tree - how on earth did that rare Asian plant ever get to this most distant and isolated area of Greece??? Drive, climb and explore around all the other roads and abandoned towers of that peninsula - the last one long and very rough and rocky - I'm very fearful of puncturing the car tires or of slipping and fracturing a bone while climbing on the rocks - but do it all OK.

Head back to Gerolimenas - a little fishing village nearby - and get a room in the hotel there - third floor with a two sided balcony looking over the waterfront and to the western mountains. Leave the hotel and do a walk/climb up a road to see two stone towers on the ridge above the town. I'm very out of shape - little energy and puffing as I climb. I'm excited as I discover wild cyclamen corms on the bank along the road with foliage drying up as they go dormant for the summer season. At the hotel I'm invited into the kitchen to check out the food available - which seems a great idea to me. I order cooked beans, spaghetti with meat and a plate of tomatoes - far too much food but delicious and enjoy it all.

Tuesday - April 26, 1988. Greece - Gerolimenas - Write at the hotel all day. Down for breakfast - I ask for coffee (usually a signal for breakfast) and that is all I get. Room not particularly a good place to work so take the computer downstairs to the restaurant tables and get a table to the side overlooking the room. See another couple eating breakfast - and discover if I ask for a breakfast that is what I get - logical. Enjoy the good Greek bread, rich apricot jam and coffee. Start typing on the log - a most enjoyable place with view out to the harbor and boats - and the flow of men from the town into the cafe for their morning coffee and arguments - the social center for the town (men only of course, as the women are doing all the work). About caught up on the log and ready to switch over to the newsletter when a farmer comes over to see what I'm doing - he speaks fair English and is intelligent and knowledgeable - came here from Hamburg, Germany 20 years ago and farms olives now. Wants to look over the computer and curious about what it does, how much it costs, etc. He is totally mystified about why I am in the Mani when he learns I am interested in plants and gardens and writing about them. We go through questions and drawings about the large foliated-bulb I've been curious about since Spain - he draws pictures and tells me about it blooming white in Dec./Jan. - but I still can't tell what it is. With his continual distraction, in trying to shut the file I'm working on somehow something goes wrong though I don't know it at the time and I lose about 4 days in the log and many hours of work!

I return upstairs for awhile and eat lunch from groceries - wanting to go out and explore for more cyclamen and other native plants - but a little nervous that the curious visitor might have been exploring for something to steal - but doubt it and decide to leave for awhile (there is no key to lock the door). Up the road and climb the steep slope - find many cyclamen corms on the dry rocky bank as they are going dormant - tempting to want to collect them to bring back but remembering the wild plant conservation concerns of today and particularly those of cyclamen expressed by Nancy Goodwin and I resist. Dig out the outline of one corm perhaps 8-10" in diameter - no idea how many decades of growth is required to achieve such size growth in this dry barren land - and photograph it "in situ" and recover it hopefully for more decades of blooming. Do find a few seed capsules and collect seed though I fear it is too immature at this point. (Happy postscript - gave the seed to Nancy in July and she now has 50 seedlings - tentatively identified as *Cyclamen graecium* - and eventually babies of this Mani Peninsula population will be on display in the arboretum).

Among many other wild flowers, discover three kinds of orchids in bloom - one in abundance. Somehow this hot, dry rocky slope is not the image I have of an orchid habitat! Hungry and want to try a different restaurant tonight - go up the road a bit - again into the kitchen for a look and my eyes cause me to overeat again - I like this visual concept! Back to the hotel and sit on the balcony watching the fishermen on the dock below work on cleaning their nets of coral rock and assorted things which get caught in them - they've been busy with the yellow nets all day and work until long after dark.

Wednesday - April 27, 1988. Greece - Mani Peninsula to Sparta to Epidauros. Make one last drive down to the spectacular southern point before leaving - then backtrack a bit and cross over mountains to the east coast which is less populated and very little traffic or visitors. Then north toward Sparta - I'm surprised to see a mountain this far south with so much snow (Mt. Ilias at about 7,400 ft). As I go north see more trees and agricultural production - abundant flowering redbud and I look at all the variation present and want to hike and explore. Through Sparta - a completely modern town with a wide central street and wide sidewalks - and no romantic historic charm or interest whatsoever. On through Tripoli, Argos, and into Nafplion where I find a huge, very modern grocery store with many expensive American foods and Kenny Rogers on the Musak system - get supplies for a day and head on to Epidauros, the site of the first medical school.

Good signposts to the site - in and see the theatre which is larger than the one at Dodoni (by 2') but with the hordes of tourists here and the less spectacular view from the theatre don't enjoy it as much. Walk the grounds - abundant wildflowers and red poppies at the west section where few people go. I'm trying to figure out the name of the god honored here and relationship to plant names - could be Aesclepias (milkweeds) or Aesculus (horsechestnuts) - and later even wonder if one is Greek and the other Roman name for the same god? Back to the museum - the most interesting thing are the flower designs used in ceiling panels.

Has been a good visit - on to New Epidauros on the water with an area with dock, boats, and an abundance of hotels. Out to eat at the seafront tables of the hotel I'm staying in. After dinner walk the plaza, look in a variety of stores - in season this must be quite a busy little resort area. Back to the room and read and to bed.

Thursday - April 28, 1988. Greece - Epidauros to Athens. Sound asleep and don't get up - my latest start - 10:00! Head out going directly to Athens - through the peninsula neck at Cornith and cross over the canal. An extremely narrow and deep man-made cut which in effect changed the Peloponese peninsula into an "island" disconnected from the "mainland" - and in the process shortened shipping distance from Athens to Italy by a significant amount. A choice to take the toll road to Athens or the old road - take the old road. Athens certainly is not pretty - but the traffic, horns, etc. are far less bad than I had in my mind from all I've read and heard about them. The entry goes quite easily and I get near the main Syntagma Square and go to a budget student/backpacker place recommended by a friend. It is fine and certainly cheap at \$16 - but a little concerned that the bar/restaurant in the place is directly across from my room and the music from the juke box may keep me awake in the night.

Check post office for mail and through another long bank(s) hassle. Wander through the district near the Acropolis and look up streets and shops to see it in the distance above. Back to the room - open up the computer to do some work and make the unhappy discovery that somehow the file got fouled up when I closed it when the Mani farmer got me in a jam to close it. No idea what happened but after working with the material for awhile I duplicate the file and can at least work with the duplicate which did not carry the screwed up command with it. Very discouraging - have lost all the Greece log and I hate doing material the second time at least three times as much as the first time. So just put in the dates - and skip to today and work on it. In the mail is a letter from Mark Kane saying to do the juniper article if I possibly can. The evening is spent reading - when I'm ready for bed the music from the bar across the hall is deafening (things from the 60-70's - first time I've heard Jesus Christ Superstar in a decade) and they don't close down until 2 AM - joy, joy.

Friday - April 29, 1988. Greece - Athens. Difficult and uncomfortable sleep - can't find any soap but the water is hot and finally get my hair washed for the first time in 5 days - feels great. Street crews are working on new tree planting pits - in all stages of development and completion. To the Athens National Museum. Packed with visitors and far too many uninterested school groups which makes the visit less than pleasant - but what one must endure for such a sensational collection. Stay two hours and get through all the sections of the museum except the large bronzes which is closed for rearrangement. The two bronzes - the "Boy Jockey and Horse" and "Posidon" are the most memorable items - just stunning in quality; and the top highlight is the room upstairs with the flower frescos from Sartolini (thought to be the original "Atlantis" site) - beautifully displayed and of wonderful quality.

Back to the hotel - had asked the attendant to let me move to another room if one was available - and one is on the next floor up so I move everything to it - larger, quieter, and a better mattress - now everything is OK. Long walk to the international phone office - and a long unsuccessful attempt to make several U.S. calls. Wander through the markets area - salamis in profusion, fruits and vegetables, equipment and hardware - then up the hill to the Acropolis.

Amazed at the human erosion on the rocks of the hill below the Acropolis - even at long distances from the tourist area - the native hillside marble is worn so smooth from traffic and slippery I can barely stand up even with tennis shoes. The visit is enjoyable and impressive - diluted by the crowds (can't image how bad it must be in summer in comparison) which really aren't that bad I suppose - but have had so few people around on my out-of-season travel I'm spoiled. The cranes and scaffolding on the Parthenon for major renovation/preservation are interesting - a unique appearance in its history and worth capturing. So sad the Turkish munitions exploded in the building - how magnificent it would be to go through and see it intact. A pity the government does not do a new re-creation elsewhere - showing the original painting and colors, etc. Greek salad and calamari for dinner, to room and open up the computer and

finish yesterday, and all of today's log. Still need to go back and reconstruct the missing 4 days and will begin work on that tomorrow. Debating whether to wait until Monday in hopes some mail will come or just head on to Turkey on Sunday. Very much want to complete phone calls tomorrow and perhaps do the juniper article. Have essentially finished what I want to do in Athens and ready to go on.

Saturday - April 30, 1988. Greece - Athens. The quiet room a relief after the hard rock music bar last night. Another morning of computer glitch - lost material & totally frustrated by noon. Surprised by loud thunder! Run to the car garage for an umbrella in a heavy downpour which is rare here. The marble used everywhere for sidewalks is treacherous when wet and I see numerous people slip and fall - I don't want another broken bone so walk very cautiously. Post office and phone office hassles - no mail and a 5 minute call is \$50! My Raleigh home construction continues a nightmare. Learn fifty rolls of film were sent to me in England as well as mail to Florence and Athens - none of which I've received - frustrating.

Back to the room down and discouraged - nothing seems right in my life in the last year. The computer battery is recharged and I work until dark with everything now finally caught up to date. The call today did help make some final decisions and the biggest is that I will not be going to India, China, Australia, and New Zealand as planned for August-December - or for that matter even staying in Europe as planned through July but will return in 4-6 weeks from now - back just in time for the summer heat - joy, joy. Wander and look at the stores in the Palka area - incredible amounts of junk and must be astounding numbers of tourists in the summer. To room and study travel guides for the next trip phase in Turkey.

Sunday - May 1, 1988. Greece - Athens. During a dream in the night I kick out to stomp something - hitting the chair the computer is on - luckily it doesn't fall to the floor and break. Awake early and think and think - seems so many problems and so unresolvable. Today is May Day and apparently there is some sort of huge communist parade - hear music and ranting speeches through the window. Finally settle to write the promised red cedar article for Fine Gardening. After the months of delay it starts much better than I had expected and make good progress.

Break for lunch and walk to the travel agency advertised in Let's Go that promises quick service on a Bulgarian visa - find it easily and will return tomorrow to see what can be managed. Back to room and continue article - going well and getting longer and longer. A break for dinner then back for an evening and finally finish the article - turns out 6 computer pages - no idea if that will be enough for what they want but it is what they will get. Slowly hand copy it off the screen to mail - seems ridiculously primitive to use a computer to compose and edit - then hand copy it to be sent so they can put it back in a computer for editing - but all I can do with the present situation. Slow and tiresome but finally finish - feels so good to have accomplished something concrete and a productive day to do an article start to finish in one day - need more days like that.

Monday - May 2, 1988. Greece - Athens to Asprovalta. Go to the "American Restaurant" I've heard of as I'm dying for a home-style breakfast. Much like a 50's Howard Johnson and indeed has a mostly "American" menu - order the pancakes and coffee (reluctantly passing on side dishes of eggs, sausage, etc.) - the syrup is not quite real - a thickened sugar water it seems - but get an amazing sugar rush from the meal which makes me realize how far away I've been from sweets for so long. To the travel agency - a woman worker is the only one who speaks English and acts as go between for the man who is in "charge" - learn they don't do visas - only sell the room and I must go to the Bulgarian Embassy myself. Estimate the time when I should be passing through Sophia, Bulgaria and get a private home room reservation for May 9.

Check out, load car, and go to the Bulgarian Embassy for a visa and find it closed - because of the May Day celebrations yesterday? Just hope I can arrange it in Istanbul instead. Check post office one last time for office mail but none. Maneuver out of Athens without much trouble and on the National Road heading north to Thessaloniki. Fairly uneventful day - much agricultural country - road winds in and out by lakes and inlets of the sea. The highway is mostly a three-lane affair with the middle supposedly for passing - but vehicles seem to rarely get far enough to the right to make passing really comfortable in just the middle lane. Sections of the road are nicely landscaped with a variety of trees. Further north see many redbuds again and I continue my hunt for the genetic variation and the elusive white seedling. As I pass Mt. Olympus I'm surprised to see the peak which is supposedly quite rare - quite dramatic with the white snowcap. At Thessaloniki it is too early to stop so continue on.

A little further up the road I am much taken by the street plantings of a German clientel summer resort on the sea at Asprovalte so stop for the night. Settle in and walk around - everything in town is beautifully planted with the first quality landscape plantings seen anywhere in Greece - is the good horticulture a product of the heavy German visitor influence?

Tuesday - May 3, 1988 Asprovalta, Greece to Istanbul, Turkey. Badly needing to have the Renault serviced before going into Turkey - nothing in Kavala, but a little later in Xanthi I see a dealer and screech to a halt. No one speaks English and they are not sure what I want but they make a call to someone, somewhere who does. After I explain to the phone voice, who explains to them - they immediately go to work while I sit out front and wait for the hour it takes. Pleased and surprised with the speed and price of the service - will be the last needed while I have the car. (I thought!)

Back out on the highway, a hot-tempered youngster playing with his girl friend in his car doesn't notice me stopping behind a turning truck until almost too late. He slams on his brakes and comes to a screeching, sliding stop not 5 inches from my rear bumper. Being a good Mediterranean type he blames the truck driver - shaking his fist and yelling at him as he passes - of course his inattention and poor driving habits have nothing to do with it. Much too close and leaves me shaken.

Through Alexandroupolis and stop for gas and meal to spend my remaining Greek money before heading into Turkey as I expect to be exiting through Bulgaria on the way back. Nervous and apprehensive about the border - and with the intense Greece:Turkey antagonism I expect the worst. See a "no photographs" sign as I near the river which acts as the border. Brief stop at Greek customs first - then across the bridge with roads curved so neither border station can see the other. At the Turkey station I fill out forms and register the car and computer (they are concerned it may be sold as a hot item on the black-market). With formalities completed I head on across a flood plain area busy with people in rice paddy-like flooded areas.

Less than a mile from the border I am stunned to see my long sought white-flowered redbud - at a Shell gas station! Do a quick U turn to go back to look at it. A spectacularly beautiful form - at peak bloom and wonderful. Just cannot believe it - collect what little seed is on it from last years bloom and take many photos. Wonder where in the world it came from as it is obviously a seedling (the only white mixed in with several others of typical magenta). (Postscript - upon return to N.C. the seed was scarified and stratified and we now have 8 seedlings growing - very slowly. In 3-5 years we'll see them bloom and hopefully have a white one or two).

The country is green and beautiful as I go along - mountainous enough that there are pretty views from hills through valleys with grain and crops. The road is busy with farm machinery but a good road. See an area with many redbuds and stop to photo. Consider a stop for the night at Tekirdag to avoid getting into Istanbul at night and all that confusion - but when I get there it is too early to stop. A military and port city - good view of it from a hillside approaching. The waterfront is a park-like promonade area with masses of people walking along the water. From that point on the coastline is almost solid with new vacation home development - an incredible amount of new construction all going up in a 1-3 year period - mostly for Germans vacationing here in summer.

Turns out I am close to Istanbul and soon am in the outskirts. An amazing entry with construction of huge housing blocks everywhere - the city goes on and on - 10 million people - with a pollution haze over everything at the dusk period. The maps I have are not good - but the main road goes by the bus station by the city wall where I can orient myself - head into the central city area - somewhat lost but manage to come out into an area where I see many hotels down a side street and pull off. By the names of several hotels I can tell from the guide what section of the city I'm in - a bit further out than I thought but good enough. Spend 45 minutes (it seems) running from hotel to hotel trying to find a reasonable and decent hotel - finally end up in the very first one I went into - a very nice room I think with shower and hot water and breakfast for about \$15.

Carry things in and park on the street - walk down the street to a restaurant where I have top price item of anything on the menu - a mixed grill of all kinds of meats, a salad, dessert, soft drink and coffee - all for less than \$5. After the \$10-20 light "snacks" so far on this trip - I'm going to like these food prices! My first visit to a Moslem nation and a middle-east atmosphere - amazed by the mosque towers seen in every town as I drove through the country - and the numbers of them everywhere in the city. Tomorrow the challenges are to get credit card money, mail letters, call the U. S. and mom - excited to be here. After I go to bed the amplified voice comes in the window from the mosque of the chanting call to prayer - I'm definitely in another culture.

Wednesday - May 4, 1988. Turkey - Istanbul. Again in the early morning hear the call to prayers from the mosques. Up for a great shower and dry and straighten out my hair - super current here and the dryer works like never before in Europe I think - nice to have hair in shape again - most of the time a shambles when windblown. Down for breakfast - feta cheese, black "Greek" (whoops - don't call them that here!) olives, bread, butter and jelly and excellent coffee - sigh!. Head in toward the tourist center of town - a discouraging thing hunting for a plastic card bank - go in many with no luck. As I work my way down the street - get to the area of the two main mosques and the beautiful park between them full of colorful flowers and take a break to do some photography there - and decide to go on in the Hagia Sophia which is quite magnificent in spite of considerable scaffolding and work inside. An amazing building which was the largest structure in the world for nearly a thousand years.

Buy a map of the city there and work my way to the post office area - stopping in more banks as I go along. Finally get an address and map from one as to where I should go. While in the area I go in the post office to get stamps to mail the red cedar "manuscript" - a long line and wait - a Japanese girl with backpack is mailing a heavy envelope with assorted books, guides, etc. she's picked up in traveling. Wants to send it to Japan by air mail - the attendant is shocked and after figuring up the enormous cost (which doesn't faze the girl) - indicates the envelope couldn't even hold all the stamps necessary. Go by the Iranian Embassy with armed men out front - see a street funeral with flower decked casket being carried - mourners wearing buttons with photos of the man - huge crowd and strangely silent.

The road leads to the market - enormous with over 6,000 shops in acres of mazelike covered building. The intense hawking of wares and constant verbal barrage wears me out and I retreat to the hotel for awhile. Later out to explore awhile - to the Suleymann Mosque but don't go in - by what I think is a botanic garden, down to the Egyptian Bazaar which is more everyday use items and not tourist oriented - huge and wonderful and I see the plant market which I want to photograph tomorrow. Then back to the hotel - a long circular walk and I am beat. Work on the computer a bit and to bed.

Thursday - May 5, 1988. Turkey - Istanbul. I have a long day scheduled of so many things I want to do - to the Hippodrome area to look at the Egyptian obelisks and serpent column - gets so tiresome fighting off the shoeshine boys and constant crowd of hawkers with everything imaginable. Go to the Kilim carpet museum which is located adjacent to the Blue Mosque - nice layout and beautiful rugs though they are not the pristine types one would see in the west - many are patchy fragments, folded, cut, faded, etc. The hawkers are at their worst right at the entrance to the Blue Mosque where one removes shoes to go in - literally have to fight your way through them to get in and surprised that it is allowed that way there - at the other mosques and museums they are at least kept a little distance away. The floor is covered solidly in thousands of oriental carpets - must cover a half acre of floor - very beautiful with the intricate blue tile work throughout.

Walk to the Topkapi Palace gate entrance - by a million tour buses jammed in the plaza - and to the complex of 3 archeology museums I've wanted to see for so long. In contrast to the thousands of tourists in Topkapi next door - I am the only one in the three museums during my stay. Very excited to see the Sumerian items - outstanding artifacts I've taught about and read of (the best display of Sumerian and other early middle eastern culture excavation material in the world) - and a major thrill to experience. Unfortunately, am run out as the museum closes for the afternoon but have gotten most of what I wanted there.

On to the Egyptian market where I do the plant market - many photos and buy several varieties of Turkish cucumber seeds for our NCSU cucumber breeder. Plants vary from the primitive (bareroot bundles of rooted boxwood cuttings) to the latest in Dutch pot plants brought in by air or truck. There is a rich array of bins and barrels of assorted seed and grains. One vendor has piles of gladiolus corms nicely displayed with color photos to encourage sales - unfortunately of tulip flowers! Such a rich and varied tapestry - trees in oil cans; leaches, snakes and turtles; high tech seed packets; and dozens of unrecognizable roots, tubers, and miscellaneous vegetative structures for unknown puposes.

Though not a travel shopper - one goal of the trip is to purchase some Kilim rugs for my new home. Steel myself to bear the hawkers and hunt through various rug stores - end up at a place called Bazaar 69 - and the guy there is not overly aggressive enough to scare me away - and the prices seem reasonable - a third of others in the area. (There must be a billion Oriental carpets for sale in a one mile radius! Confusing.) Go upstairs on a tiny winding staircase - have a couch chair at a window overlooking the street and go through stacks of hundreds of carpets finally narrowing the decision down to 4 rugs. They have to repair one rug and I wait nearly two hours. While waiting, a little squirrel pops out of the rugs and scampers about. A little later - one of the store men and his son come in and I motion about the squirrel thinking it has gotten in by accident and might damage the carpets. Turns out it is a pet and lives there - the owner gets a walnut meat and puts it on a toothpick and feeds the squirrel who scampers on his arm fearlessly.

I go out to scout out some more things of interest. Go to the Suleyman mosque - in a poorer older neighborhood with many unusual wooden buildings not seen elsewhere. Decide not to go in as I don't have my camera and will do that later. At the location where I think the botanical garden should be, the gate is closed for the day so will have to check that out also.

Friday - May 6, 1988. Turkey - Istanbul. To Topkapi Palace - there about 9:30 before the tourist flow hits - the bus parking area is virtually empty compared to my visit yesterday afternoon. Go in and buy a ticket for the harem tour at 11 - wander and look at other things - first to the ceramics collection - then decide to go on back to the far back corner to see the garden pavilions area before the crowds get heavy there later in the day. The area is reputed to be the garden where tulips were first introduced to garden culture in the 1500's - eventually expanding to a significant ceremony to invite guest to view the height of tulip bloom. In the museum there are paintings of sultans surrounded by tulips in specially designed tulip vases - and a large collection of the actual vases on display. Sadly, today the garden spaces have been turned back to sod for cheap, easy maintenance and there is not a tulip to be seen in the entire Topkapi complex though they are in season and in bloom in the city parks. But with the marble fountains, plazas, stairwells, viewing pavilions, etc. - the gardens are still beautiful and the associated peninsula pavilion is so wonderful inside with an amazing view across the strait separating Europe from Asia - what an incredible place it must have been when the gardens outside were cared for and at their peak - a pity they cannot manage such today (or choose not to as the income generated from the masses of tourists must be significant).

Go look at the holy relics of Mohammed - a letter he wrote, personal possessions, a bone fragment, and a small fragment of the black stone at Mecca displayed in a beautiful, almost abstract, solid gold mounting - I'm very impressed. Then through the fantastic treasuries to look at unending jewels and gold - amazing with 3" emeralds, baskets of pearls, a solid gold throne decorated with diamonds, a pair of 6' tall solid gold candlesticks, etc. Then back for the Harem tour - interesting and our guide is good but the overlapping blend of English, German, and Japanese guide leaders makes it a confusing blur. To the restaurant - very pleasant overlooking the Bosphorus and watching the ships go by.

Wind through town to check out the small botanical garden in the courtyard of the University of Istanbul. Not many plants but some nice weeping elms, fastigate English oaks, and ginkgos. Look at the posted grades for students in some botany course and reassuring to see they vary as wildly in performance as mine do.

Back to the Grand Bazaare - shock myself and buy another 6 rugs! I never shop when traveling - what is going on? The stack at the hotel is now over 4 feet high - have no idea how I'll ever get them in the car - let alone carry everything through customs when I get back. Have a severe junk food urge and head out to try to find the only McDonalds in Turkey - an hour of driving (and paragraphs of description which I've had to delete). They haven't managed a true American burger but not bad for such an exotic locale - enjoy it. Decide I'd like to try to get back to the Blue Mosque in time for the evening sound and light show. It is only a mile - but with various winding around and missing streets it takes over half an hour to drive it. The parking attendant tries to overprice at \$5 for a street place - but we settle on 80 cents - haggling goes on everywhere. The show is nice but perhaps not memorable. Today almost a perfect day - wonderful things seen, the rugs are a good buy and a memory, the McD a treat and the finish of the sound and light a nice end to the day. Turkey has been a special treat and most enjoyable - somewhat to my surprise I think. The hotel room the best I've had in terms of facilities for price.

Saturday - May 7, 1988. Istanbul, Turkey to Asprovalta, Greece. I set the alarm clock so I can get up early to go call NC - the clock off at 5 AM and I dress and head out. The best time to drive in Istanbul I decide - only me and the police and a few taxis on the street at this hour - a few Muslims on their way to or back from prayers - heard the call to prayer before getting up. Easy drive to the post office wondering if indeed the place will be open but it is and the call goes through almost immediately - mostly more bad news and I return to the room subdued and down.

I get out the original trip plan and find I am very far ahead of schedule - should just now be leaving Greece for Yugoslavia and Bulgaria. The thought of the complication and hassle of trying to find a Bulgarian embassy in Istanbul is just too much to deal with - so I decide to reroute back through Greece and up through Yugoslavia instead. So much for my prepaid room in Sophia. I leave cheap travel here - after southern and eastern Europe the next 6 weeks will be back to skyhigh prices - not a pleasant thought but I'm going to play through this scenario as far as I can no matter what. Pack up the mountain of things scattered all over the room - the car is filling.

Leave about 8:30 - traffic is still very light and the route is quick and easy to get out of the city. The main problem is a light rain - enough water to splash up mud from passing vehicles but not enough to work with the windshield wipers - the windows are a mess with almost no visibility to drive with. Out on the road heading west - good road and speed - a grey and sleepy morning. Have to get off at one point with road construction - wind through a little town with cattle, tiny streets, have to jump a potential deep ditch. I see tulip-shaped headstones in a cemetery I wish I had photographed but seems too complicated to try to stop so let it pass. Back on the road - I'm sleepy and doze off and on - non-descript and non-remembered drive across Turkey in leaving. Sheep and goat herds everywhere as I near the border - the herders wave at me as I go by. Stop at one point to wander looking at the wild plants a little - but little herbaceous left from all the grazing animals - purple flowered thyme, blue Lithodora (?), several oaks, a Carpinus, etc. - and a lizard and a big tortoise.

Worried about the border - fearsome I will have to unwrap all the rugs - which has replaced my fear of the guards finding an antiquity on me (carrying unauthorized antiques out of the country is an instant prison sentence whether you know they are antiques or not! For whatever it is worth, the dealer has provided a certificate that none of my rugs are illegal - sure, sure.) - would be a huge hassle and make the rugs so much harder to handle. Stop at the white redbud Shell station and use up almost all the last of my Turkish money for gas and get a few more photos - my timing before was about right - at this point the redbud flower display is winding down and I probably would not have noticed the white one from the road except for about a 8-10 day period - still amazed by it all. They have a hose washer and wash the mud off the windows and car which is a big help. The border crossing goes well - the Turkey side the easiest to my surprise - they stamp in the passport and send me on; more time on the Greek side - mostly from indifference from the people in the office and they seem only concerned if I am bringing in a videocamera. Then to the bank to cash a travelers check - get drinks and head on.

Again the drive across Greece is a repeat of already seen country - today the light not as attractive as the drive in the other direction. But still a number of stops to get wildflower photos - a wonderful field of brilliant intensely-red poppies (*Papaver rhoeas*), masses of lime-green Euphorbia, flowering ash in bloom (*Fraxinus ornus*), cornflowers, and others. In to Asprovalta about 4:30 - a long drive and I'm very sleepy from the lack of sleep last night. Take the same hotel I stayed at last time - the woman is amused by my returning the key I accidentally took with me from the last time.

Go out for another walk - more tourists in town than the last visit - all German. Go to the beach and watch waves and clouds as the sun sets. A relaxed and very pleasant meal and sit and watch activity on the street. Note that I am beginning to think of this trip in a past tense now - mentally it is probably over now even though 45 days (one-third of the trip) still remain - and beginning to think more positively of the early difficult experiences and remember them as good ones. Tomorrow on to another country new to me - Yugoslavia. Wondering how that will go - the visa process at the border, how to get money, finding places to stay and food, etc. - should spend two days there; and in studying the maps have a new thought of the possibility of going on to Hungary on the way to Vienna. A long time getting to sleep thinking about trip, home and office problems - but nothing I can do about them.

Sunday - May 8, 1988. Asprovalta, Greece to near Belgrade, Yugoslavia. West to Thessalonika and I barely see a tiny information sign as I go through town and have to turn around to get the bypass to head around the city and then north. At the border have to go to two desks to handle the Greek work - nothing too involved with the main problem their indifference. Then to the Yugoslavia border - give my passports to one guy who takes it in an office - another waves me through the border without it and I have to park and walk back and get it. Change all the Greek money I have into Yugoslavia money at \$1 = 1250 Dirin. Get in big confusion about gas coupons - but no English is spoken by anyone and just go on without them hoping no problems later. The border crossing is all very simple - much less than I expected after all the anticipation about this country - another first visit for me, the fourth "new" country of the trip.

First impressions - grapes, fruit trees, greenhouses, a productive valley in a semi-dry area probably getting about 30 inches of rain a year? Go up the Vardar River Valley which I remember from a lecture I saw Dr. John Creech give showing where he found the 'Vardar Valley' clone of boxwood - and see the pass through the mountains which he showed - so stop and climb a mountain ridge to get a good shot - disappointed that there is little of herbaceous interest after the sheep have finished the hillside. Hunt and hunt for a population of boxwood with no luck. Just through the pass there are commercial fields of opium poppies in spectacular bloom so stop to see that.

The terrain changes quite markedly during the day - through a dry area which reminds me much of Oklahoma (with grapes - which doesn't) - then a mountainous area covered with trees and quite beautiful - broad, flat valleys with intense agriculture, etc. Never see any sizeable cities - but the many smaller towns seem to be prospering with considerable new building construction everywhere of brick tile with red tile roofs. Everything revolves around agriculture and every home has a vegetable and fruit planting. Wild seedling fruit trees are left in most of the agricultural fields. See everything from horse and oxen operated farm equipment to the most modern tractors and irrigation equipment.

Make better time than I would have expected and am getting near Belgrade so I decide to stop for the night though early to avoid hassling with the town which the book says is difficult for rooming. Stop at a motel with no idea what the cost will be - about \$28 which I think is high - but don't want to fight to find anything else. Settle a bit and go for a ride to look around the small town and area - enjoy

the May Day flower wreaths (now mostly dried out) on all the gates of every home in town - fascinated by the incredibly wide variety of property fences (which I see everywhere through both Yugoslavia and Hungary - quite a folk craft and someone could do a book on the thousands of fence details), and more kinds of interesting garden plants than I would have expected - need to photograph some of them tomorrow. On a tentative countdown now and ready to go home - calling it 44 days to go now.

Monday - May 9, 1988. Belgrade, Yugoslavia to Budapest, Hungary. Down for breakfast and there is some communication problem as no one understands English - most interesting are the heavy bread "frisbees" - about 7" in diameter and an inch thick and heavy as lead. Go back into the little town to photograph the fencing details and some of the plants of the area. Then to Belgrade - not far away and am there in an hour. The entry into the town goes well - by blocks of impressive socialist housing which looks so good in these countries from a distance and are more like our failed mass housing urban blocks in the U.S. on closer look. I am surprised I can handle my rather poor map to get in OK - do stop a bit further out than where I thought I was located on the map but not a major problem. Enjoy looking into the stores - the level of consumer goods is not as great as western areas but more than I expected and there is a good selection for the people nonetheless. See the tourist information center and find out there is a botanic garden in the city. Walk up a pedestrian street where I see burnished steel sculptures in large numbers on a closed-off pedestrian area.

On up the street to the large city park nearby - an informal area with little care - woods and paths. A nice overlook across the river to the "new" city with blocks of jazzy buildings - a skyscraper with two wings connected at the 15 story level, etc. Many fine plants in the park - Acer negundo 'Aurea' (golden box elder) 45'H, Fraxinus ornus - 50' H and perhaps the largest I've ever seen - in full bloom, tennis courts in the castle moats, bronze statues - beautiful and most enjoyable area. Back into town - continue to enjoy the excellent political cartoons on display everywhere in all stores along the streets.

Hike across town and hunt up the botanical garden - but sadly the garden is a disaster worth little effort. Most of it has been abandoned for years with areas grown up in brush and weeds - the old ornate conservatory which was quite beautiful in its day is abandoned. Do find an area where most of the trees are labeled and find some interesting things among them - nothing exceptional though. Only a small rose bed is still maintained and the park is obviously used primarily for elderly people to sit on benches or babysit with small children. Yet there are 4 gardeners working - or at least they are leaning on tools on "break" (?) and that many people could keep such the entire garden area well maintained if there were any motivation - which there obviously isn't - sad. Do find a Cercis siliquastrum of interest with very nice, clear pink flowers and get photos of it - but no seed. Although it would be great to try to get sion wood of this good color form to add to our collection - certainly the logistics of finding a contact and arranging to get it shipped would be formidable.

Stop to have photos taken for a visa at the Hungarian border - takes an hour to have them developed and printed - no Polaroid here. Continue on down the street to the only McD in Yugoslavia (beginning to collect them!) - it is packed and a considerable line wait to order. They do it pretty well surprisingly and enjoy the meal - a real surprise to find one here. The outside is in a traditional building of the area - inside is jazzy with mirrors, paintings, marble tables and could be anywhere in the U.S. with no problem. Easy exit from the town also - impressive highway and new buildings everywhere - extensive redbud plantings on the road at peak bloom.

Head out through the country again - good road for awhile but eventually lose it - actually the road is satisfactory - but the truck and farm vehicle traffic keep me slowed down. The region reminds me much of the U.S. plains - flat agricultural area - one town has grain elevators much like those of my childhood - a nice feel of it all to me. See many beautiful old tree peonies in one little rural town in full flower - how did such an exotic plant come to be so widely planted here? - perhaps a generous amateur hobbyist or speciality propagator?

Fill up with gas before the Hungarian border to use up as much of my money as possible in case I can't change it in going out. Nervous about what will be involved but it goes surprisingly well - if it wasn't for additional fussing about registering the Turkish rugs it would all have been done in about 30 minutes. The guards are young and friendly - the woman who handles the forms and money is a bit of a surly person. There is concern about the rugs - and so many of them - I have to tear the corner off two packages to show what they are and have to leave a deposit of \$200 to ensure I don't sell them while in the country. I'm concerned about it and about to cancel plans for Hungary and go around when he assures me that I will pay in dollars and get dollars back. I'm going to be extremely upset if it is not the case! There is a bit of a demilitarized zone at the border with wire fences and guard towers but very carefully screened with plantings so barely visible to people passing through the station - and of course no photographs are permitted anywhere near the border.

Head on to Szegny which is just a few miles away - the commercial center for a large agricultural region in the south of Hungary noted for paprika production - and stop at a motel. I'm confused with the exchange rate - with all the various payments I made at the border never was certain what actual dollar exchange I was getting - am estimating about 50 florins to the dollar and that makes the room about \$20. Check in and fill out forms for the police to keep tabs on foreign visitors. Drive into town to look it over - clean and nice - attractive area by the river - see TV trucks filming something - very much a great plains feeling about it all that I like.

Tuesday - May 10, 1988. Szegny to Budapest, Hungary. Down for breakfast and the dining room is still closed. From the TV sounds emerging I am convinced the staff is watching cartoons rather than let waiting customers in. Like everything I see here - the hotel seems well conceived and not too badly installed - but then no maintenance and it all falls apart. The lounge has marble floors and leather furniture - but everything is covered in dust and the windows are smeared and dirty as well - yet the help was lounging around yesterday with few guests in the hotel and doing nothing. Again lack of English is a small problem but they get "eggs and ham" out and I agree. Get passport back and load up to leave. About a three hour drive almost straight north to Budapest - again the drive is through agricultural country which I enjoy - also doing much thinking about Raleigh, work, the arboretum, the new house and bankruptcy - my usual list.

Get to Budapest about 11:00 - a large city and I am able to follow my progress in on a map in the atlas - also look up a possible hotel to check on - the first place I check is \$100 per night, and the Metropol is \$50 - both in US dollars only so I am quite discouraged about that as the Metropol was listed in the guide as inexpensive for Budapest. See an IBSUZ (travel agency) - go there to check - all she does is give me a list of hotels which doesn't help much. Decide since it is early in the day to drive north to the Danube Bend which is given good writeups in the guides - see what that is like and if I can get a cheaper price there - if not come back to the city later. Again wind through the city - on the road north easily. Go by Roman ruins which would be interesting to see later - then to the little town of Szentendre which is a tourist/artist's colony sort of place - off the road and park.

Walk around the town a bit - I'm vaguely hunting an outdoor sculpture garden but can't find it. Chose one of the many restaurants and have an excellent meat and bean soup, and a country fried steak with rice and potatoes - enjoy the bargain prices. Walk and look in various craft and art stores a bit - back to the car and drive to find the sculpture garden - it was once obviously very nice when installed but again has deteriorated from any lack of care. Head north to do other towns on the river tour - see many things of interest to photo on the way back. To Esztergom - where the largest church in Hungary is located - make a quick stop to walk around it and step inside - it all seems so strange - location on a cliff, etc.

Back to Visegrad and go up to the citadel on the top of the mountain overlooking the river and countryside - lilacs are naturalized and blooming in the woods and along the road. Back to Szentendre and end up at the Party Hotel. In spite of the name - a quiet and delightful place on the river - a unique two level room with bath and cabinets below with a little deck - and the bedroom above with alternating width steps up. Settle a bit and return to town to get drinks at a grocery store for the night - learning something about consumer choices here - there are few. Get 3 bottles of assorted flavor drinks - strawberry, orange, mango - there are no colas and the bottled water I've seen everywhere in my travels is not available here. Back into town to the most elegant restaurant of the trip with folded napkins, glasses, pink table cloths, etc. - all of the tables except one are reserved for later customers. They specialize in Italian food (which I never got in Italy of course) - outstanding and the meal is less than \$6 for what would be \$100 in Paris or London.

Wednesday - May 11, 1988. Budapest, Hungary. As I go further north, the sun comes up earlier and earlier - and here with a skylight which cannot be blocked it is light very early (5 AM?). Later in for breakfast - am the only one in the hotel - have huge cups of coffee with a whole pitcher of coffee, big basket of fresh cut bread, and bacon and eggs - fine meal. Want to photograph things seen on the road yesterday so head north - and slowly work my way back with many stops to shoot various things - a beautiful small cut flower nursery specializing in Allium, the abundant variety of fences, individual plants in various yards including a large drift of purple German iris, aerial fertilizing of agricultural fields by helicopter, etc.

To the Roman town site at Aquincum - the site turns out far more interesting than expected and a good example of what the Greeks and Italians do not do with their sites in outstanding presentation and interpretation - beautifully handled with good design and techniques in display. One enclosed building has stunning flower pattern ceiling displays - the museum is also wonderful though very small. Why can't the Greeks do this sort of thing at Olympia, etc.??

Head on into Budapest to the City Park which I circle through to get an idea of the layout and then park. The huge Agricultural History Museum is housed in a collection of buildings representing architecture styles of different periods of Hungarian history. It is quite astounding with separate displays for animal husbandry, fishing, hunting, forestry, ecology, and horticulture. Strange juxtapositioning of the ornate elaborate interior architecture and farm displays - but wonderful.

Out and walk on to the big National Plaza and to the first of the museums there which turns out to be contemporary art - very good (probably best of the trip), quite varied and most enjoyable. Across the plaza to another museum containing classic art - excellent Roman and Egyptian halls and endless halls and floors of fine painting galleries which become glazing to the eyes and mind after awhile - even a room of Rembrandts fail to excite at this point after weeks of the best of the world's museums.

Walk to the botanic garden conservatory area and discover the entrance gate is no longer open there and have to backtrack to the zoo entrance to get in. Then through the zoo to the "botanic garden" area - in reality plants are scattered throughout the zoo - a few OK displays but nothing stunning. A wonderful purple tree peony - a pseudo-Japanese "garden". The conservatory has the traditional division of display rooms - bromeliads, cactus, etc. - an unusual aspect is the display of snakes and alligators along with the plants - and the alligators with money on them tossed in by tourists.

Tired from the busy day and head back to the hotel - an easy and fast drive of about 20 minutes. To a restaurant with a menu in 12 language versions outside. The wording is flowery in elaborate descriptions of the food - but it does turn out quite good - a soup, then pork slices with a mixture of mushrooms, peas, corn, etc. on top - with potatoes and rice, followed by hazelnut and whipped cream and espresso - very fine meal for only \$5. Look through the guide book to try to plan the rest of the Hungary stay and then get out my garden guide book which I've not seen in quite some time to look ahead to Austria and Germany and my return to "real gardens" again.

Thursday - May 12, 1988. Hungary to Vienna, Austria. Was here long enough to have the maid do laundry and it is a delight to have some pressed clothing again for the first time in over three months. Head southwest to Lake Balaton - an excellent divided highway with many gas stops and restaurants. Get to the lake and around the north end with almost solid development of summer campgrounds and smaller resorts along the west side to the peninsula of Tihuny which sounded intriguing in the guide and is less than expected in reality - the "volcanic cones" are hardly in evidence though the lake in the center is obviously a caldera. But a pleasant area with fine private villas and have a nice lunch in a picturesque tourist village. Trying to use up all my money as I can't convert Hungarian money after leaving the country. Buy gas and tell the guy to put in 80 F - which is exactly enough to fill the car and "finish" my money.

A nice drive west through rural areas - flat plains to undulating hills - mostly grain, but also fruit crops, vegetables, much yellow-flowering rape - very pretty country to my farmboy eyes. Head to Ferzod to see the Baroque residence of Esterhazy . Find it fairly easily - in the courtyard a worker at the place signals me to follow him and takes me to a side door and shows me to the old chapel inside - magnificent though deteriorated - and filled with tools and used as a storage shed - is it the communist government approach to not promoting religion in any way - or just difficult to include in a tour as it seems separate from everything else? Back to the main entrance and have cloth shoe guards tied on feet to keep from damaging the wooden floors while on the tour - am taken in to join a Dutch tour already in progress. The interior is all white with gold wooden scroll work, white and gold ceramic heaters in corners - very similar to Schonbrunn in Vienna only a few miles away and obviously created under similar conditions by the same artisans at the same period. In contrast to the immaculate preservation and display of that palace, most of the Esterhazy fine furniture and paintings have disappeared into national collections elsewhere or were destroyed in the war - and almost nothing remains of the once immense and elaborate gardens shown in the paintings on display.

Head on toward the border about 15 miles away. I have many concerns about the border crossing which all prove fruitless - get through quickly and easily - and don't have to unpack the rugs which was a major worry. However, contrary to my earlier promise; I get my rug deposit money back in Austrian shillings instead of dollars. I'm about 35 miles from Vienna at 6:00 so head into the city to find a room . For the next 4 hours I drive and stop at every place I see - all of which are full, closed (wierdly - lights on but no one in the place and no one answering doors), or in the case of the Novotel - too expensive (\$125 for the last room in a place like Motel 6). Finally end up at a place back near the border where I started when I finally find a little bar/hotel with a room for \$60.

Friday - May 13, 1988. Austria - Vienna to Linz. Load into the car and head back into Vienna - long hunt for post office for mail pickup - the air expressed shipment of 50 rolls of film has arrived, thank heavens. To the Belvedere Palace wanting to see the famed alpine garden which I missed on an earlier visit some years ago - there are millions of tourists and endless bus tour groups. Walk around the palce to the formal hillside gardens and explore that but find there are only formal sheared hedges areas. I'm ready to give up on finding the alpine area but finally hike to the south side and find the entrance well hidden there.

A tiny but excellent garden which is filled with plant treasures and very well maintained and labeled. The highlight is a beautiful plant of *Rhododendron macrosepalum* 'Linearifolium' in full bloom with narrow straplike purple petals - and I "discover" the Japanese Lily-of-the-Valley, *Convallaria keiskei*, for the first time. Nice to have a building with rooftop access to shoot down into the garden. Then through the the 20 acre arboretum and botanical garden also.

After adding an Austrian McD to the collection - decide I've had enough of fighting trying to find things in a large city and am ready to head west toward Linz where I want to spend the night. As I head out of the city discover I am going by Schonbrunn (a Versailles-like palace and elaborate gardens from 1683-1714) and stop for a quick tour of the palace which I missed when I saw the gardens years ago. My timing is good again - zillions of tourists stacked up for tours and I get directly in on one of the few English tours of the afternoon. An interesting tour (I guess) - but lengthy explanations of the details of 40 rooms do get wearying before it is over. The same white/gold motif seen in the Hungarian palace - but on a vastly larger scale here. Also the huge reception room at the building center, the hall of mirrors, the rosewood and antique prints room which cost (they say) a million pieces of gold. The tour lasts about an hour - amazing just how many tours are jammed into the building simultaneously and how many people they funnel through in a day. Go out to the gardens and I really don't want to walk all of them as I already have good photos and it is now very dark and cloudy - take a few photos and head on. (But the gardens are outstanding and highly recommended to others - the finest sheared tree hedges in the world, elaborate flower parterres, huge cast-iron conservatory, etc.)

See signs for a combined McD and BP gas station - stop for that and experience my only drive-through fast food in all of Europe - get a coke and an apple pie to go - how all red-blooded American! Wonderful road and make good time - not nearly as good as most drivers who are zooming by me as though I were standing still. In to Linz about 6:00 - follow signs to the train station to get hotel information. An interesting cream of garlic soup for dinner - and an evening of productive computer time

Saturday - May 14, 1988. Linz, Austria to Munich, Germany. To the Linz Botanical Garden - the first "real" modern botanic garden of any quality since England (excepting Villa Taranto) and though small and young by European standards (10 acres - founded in 1950) it is quite good. The entrance area with alyssum and candytuft in full bloom with specimen red-leafed Japanese maples is spectacular with probably its best appearance of the year. A photographer and model are doing a fashion shoot which seems to be directed mostly to shooting as much of her thigh as possible. Other than them I am the only visitor - take an hour to do the garden - probably the highlight is a fine flowering specimen of *Xanthoceras sorbifolia*.

Stop for gas going out of town and divide the remaining Austrian money to have enough for lunch and hope the gas will get me to Munich (which it does) - should use the car wash service they have as the car is almost to the disgustng point - Austria will probably give me a ticket or ban me from the country in violating cleanliness laws. A beautiful two hour drive to Salzberg - gradually into the mountains area - staying out of them to the north but skirting them in constant view - the country looks like it was designed by an aesthetic standards committee - even the cows are arranged properly around trees in pastures - everywhere maintenance is going to repair barns, etc. - there is no trash or billboards.

Arrive Salzberg about noon - see a large container nursery as I exit from the highway and wind around the town getting off on a private road before finally getting back to photograph it. Salzberg does not turn out to be a good stop as I had planned - can't find the beautiful gardens at the center of the city I remembered from previous trips - drive around and around and everything just seems a muddled mess. Back on the road on the way to Munich - an uneventful drive with the speedsters blasting me off the road.

In to Munich about 3:00 - a poor map in the guide, poor Centrum signposting and I am wandering blindly it seems to me - but near the center begin to see signs for the Bahnhauptof and follow them in to the train station where I actually get a parking meter with time left on it. Go in and get a hotel reservation, change money (able to use the plastic for an advance), and get a USA Today and Time. Back and drive to the hotel which is just a few blocks away - somehow not the best feeling about it - expensive, impersonal, and turns out that showers are on another floor and extra cost. Settle for a few minutes to relax and read the highlights of the news.

Decide to do the walking street downtown - the street is less interesting today than I remember it from previous trips - tulips in bloom in planters. I get out maps and the garden travel guide to plan the next several days and the route back. Still having trouble in getting good information for the Weihenstephan trial gardens and will have to go out for what will probably be a wild goose chase tomorrow with no results - will I ever find this impossible place (on a previous bus tour I lead several years ago, we hunted a half-day wasting time and never found it)? It is obvious from the German prices I am going to have to move on quickly - though England will be no better I guess. I'm tired and the spirit of positive learning and achievement is about gone now as I go through gardens - it is almost something that duty requires to be accomplished to justify the trip a little better in my mind. When I get to London there should be a considerable amount of mail from a variety of people - at least I certainly hope - am so hungry for news.

Sunday - May 15, 1988. Munich to Tübingen, Germany. Make another attempt to find the shrub trial gardens at Weihenstephan (listed in my guide as "the center of German shrub testing and the headquarters of the international shrub register. Created in 1948 and covering 12 acres"). Go north toward Freising - a fast autobahn trip on a beautiful clear sunny Sunday morning without too much traffic. Stop for gas and information about how to get to the town which proves to be adjacent and just west of Freising. See the agricultural university complex and drive around the campus until I see beautiful ornamental plantings which turns out to be the landscape/horticulture department area. The student designed and maintained plantings are excellent and I photograph them - but still feel it is not the research trial area I am seeking.

Finally find the arboretum in the research farms areas and I go through it. Somewhat happy now I didn't find it with my tour group in 1987. Much to see but probably at its peak 10 years ago - now overgrown and somewhat rundown, and also suffering badly from a severe drought at present. Disappointed the 250 tree peony varieties mentioned in the guidebook are not there as it is their bloom time in the region. Very, very dry and they are trying to water plantings with inadequate equipment.

Back to Munich and to the Botanical Garden. Debating whether I should spend the time to do it as I've been there several times including last year - but later glad that I spent the effort to do it again. An outstanding garden of 50 acres developed in 1914 with superb collections of all kinds - a plant families garden, the alpine plants habitat, the conifer garden, the greenhouse displays, etc. The garden is at peak spring display with tulips, candytuft, alyssum, tree peonies, etc. - many fine things and take many photos.

To the Munich town center and walk into the English Park which is packed with tens of thousands of people on a perfect sunny spring day. It is one of the largest parks in a European city and the largest English style landscape outside of England - nearly 1,000 acres which were developed in 1793. The several thousand nude sunbathers along the river provide the best clue that the park is not in England or the U.S.! Come to the conclusion that it is an exceptionally rare person who looks more appealing nude than clothed.

Ready to move on so leave Munich heading west to the Stuttgart/Tübingen area. On a Sunday the autobahn is absolutely packed with traffic - jamming up of cars and slowdowns - alternating between 10 and 80 mph. At Stuttgart split off and go south to Tübingen. Drive up a hill overlooking the town where the Tübingen Botanical Garden is located. Although only 6 PM, unfortunately the garden is closed for the day as there are still hours of sunlight and the light is very good at that point. So I just look down into the garden in frustration. The town is complex, roads are a nightmare, and there seem to be no hotels but finally settle in for evening.

Monday - May 16, 1988. Germany - Tübingen to Aachen. The University of Tübingen Botanical Garden is one of the youngest in the country, opening in 1969 - but its 25 acres are superbly designed and intricately planted. Do a fast tour of the garden - a near-perfect university garden in my view. The valley of ericaceous plants, the rock garden, and the contemporary conservatory are all highlights. The light is not as good this morning as last night but OK. Back to the car and head on north back to Stuttgart to try to find a new art museum which has rave reviews as one of the best architectural designs in the world. The city proves frustrating to drive in - but finally get to the train station/shopping complex on many levels area. Park and go to the station tourist information center but cannot find out anything about the museum and leave the city in disappointment.

Head on north just a few miles to the town of Ludwigsburg where I want to see the 1704-1773 baroque castle (largest in Germany with 18 buildings and 452 rooms) and extensive gardens. Do a long walk around the garden - parterres out front, a historic roses collection, a woodland tulip walk, a perennials and bog area, a "Japanese" garden, a rhododendron quarry, fields of a half-million tulips (which are being removed today at the end of the season by a large crew of gardeners), and a large formal parterre at the back of the castle - a worthwhile stop. Back out on the highways and make a decision to make a run for the north - in the long run probably a mistake but wanting to get to mail, and the feeling England will be cheaper than this horribly expensive area. So give up the planned gardens of Würzburg and Frankfurt and just do a heavy day of autobahns - flying with the traffic.

Get to Bonn about 4:00 and decide to try to do a fast run in to see the Botanical Institute of Bonn University - on the map it looks simple but turns out a mess and lost most of the way - but finally get to the garden. Turns out much better than I would have expected with 16 acres of plantings dating to 1818 - wonderful old conifers, a fine plant families area, nice trees - good evening light - worthwhile and just nice to get out of the car again after an intense 5 hour drive. The most exotic plant is a 35' wide Ginkgo biloba 'Pendula' trained over a frame.

Then on to Aachen (the last city in Germany before the border) as the guide book says Belgium is even more expensive than Germany (hard to believe), and I'm hoping that an out-of-the-way smaller city may be less expensive than the big cities. Get there and turns out the worst city roads/orientation mess of the day. Do a drive through of the main city street and only see 3 hotels - check them and they run \$75 to \$125 for a night and they are small and not that particularly nice. After two hours of hunting I finally get a place near the train station and still outrageous.

Tuesday - May 17, 1988. Aachen, Germany to Dover, England. Load in and wind my way out of the city a bit lost but finally back on the main road heading toward Lige, Belgium. When I get there the signage is very poor and miss the first entrance to the city - then in on another one - very poor signage but finally get to the center of the city and there is no information center sign. Drive around in circles a bit - finally park so I can go change some money to have Belgium money - and in the change place I see a info center sign and get an address. Though it is close by I drive there - amazed that there are no signs for it anywhere except on the building itself unlike anywhere else in Europe.

So I am finally able to get a map and directions to the University of Lige which is south of the town. Wind around and make all the turns OK - up to top of a steep hill plateau then into the campus. Again poor signage and I hunt around - finally finding the botany department but no sign of the botanical garden. Finally get there by going in on a tiny unmarked dirt road through the woods off the main road - then drive through a "do not enter" sign to get to the University of Lige Botanical Garden. Very obviously they do not want the public in to the area. And as I get there I can see why - though there is a huge (78 acres), beautiful site, and when the new campus was laid out in 1968 there were once plans for a large and elaborate botanic garden development - time and priorities changed and molecular biology and the phytotron have obviously totally captured the department today. Get out and look at the plant families garden and conifer collection briefly and leave.

Back on the main road and a fast drive to Brussels - again very poor signage as I work my way into the center of the city with my map. At the center where the info center is supposed to be - the entire area is under reconstruction. Park and go in train station - no information there either and by this time I have had it with Belgium. Unlike the rest of Europe, there seems to be a total lack of any concern to provide tourist information to anyone in this country. The next two Belgium gardens that I want to see on my list have problems - a university garden is open 9-12 on Sunday and 2-5 on Friday (obviously, they really want visitors also); and the other one I can't even find the town listed on my rather detailed map in the highway atlas. I've completely had it with this country and decide to scuttle it all and head for England - just tired of dealing with all this nonsense.

So hit the road to the coast, through all the development there stopping to photograph a ship-shaped hotel. Expecting no problems at the French border but when they ask where I have been - in frustration I say Turkey (as it was the furthest point of the trip) which is the worst possible answer I could give with the reputation for drug traffic there - a flock of police descend on me and I am taken into the office for questioning. I go back out with them and they go through everything inside the car carefully - and then they give up, thankfully before deciding to get in the trunk where I could just see us opening up all the packages of rugs. Finally I am let go - later waved down by the French police again on the road - and later see them getting others at another stop - what is going on with these people?

There are several alternative ways to get across the English Channel - decide to go from Calais, and decide on SeaLink rather than Hovercraft. Get to the terminal minutes before a ship is scheduled to leave - I run in the terminal and get a ticket which is far more expensive than I expected - almost as much as my much longer earlier trip to Holland which included a sleeper - and this trip is only an hour and a half. I work on notes and a list of the gardens I have visited in the past 3 months during the crossing. At Dover through customs much easier than the earlier stop in England. Drive around Dover a bit and quickly find a place to stay for the night - has a TV which is essential at this point in the trip. After a fish and chips place I veg out on BBC with a wonderful show on new public architecture in Berlin, then a nature show on Australia which has fantastic photography. Go through my entire garden guide and make up a potential checklist for touring to "finish up" England. Enjoy the evening very much - so happy to be back in England. Though prices are still high here - at least they speak the language and are friendly and helpful.

Part IV of the sabbatic leave continues in Issue #21 as I wander through thousands of English gardens, overdose on the Chelsea Flower Show, and head into Ireland. And back to much more "plant focus" than this segment.

NORTH CAROLINA PUBLIC GARDENS - 1989

The following compilation resulted from a mail request for a listing of the public gardens of North Carolina for an extension service office in New York. In going through various travel guides and information in my files - I came to the realization that information is quite scattered and often unavailable on just what public garden resources are available in the state. And for the public gardener or tourist, this information is even more unknown. One of Raulston's "Laws of the Universe" states: "The closer something is to you, the less likely you will ever see it." (It's always there and I'll go see it next month). When I was a graduate student at the University of Maryland, I was amazed at the number of people who had lived in the area all their life and had never visited the magnificent Smithsonian Institution museums in downtown Washington, DC - only 3 miles away. Coming from Oklahoma they were immensely fascinating to me. On the other hand, I was 45 years old before I visited the History Museum in Oklahoma 8 miles from where I grew up and lived for 20 years! I know the roads of London better than those of Raleigh, and have visited far more nurseries in Oregon than in North Carolina - so this unfortunate but very human trait is quite universal. We have a wonderful developing network of public gardens (and outstanding speciality nurseries) in North Carolina with great diversity and excellence. The following partial listing is published here to encourage wider awareness of this array of facilities - and to encourage greater visitation. Perhaps along with your visit to Sissinghurst, Longwood

or Callaway Gardens this summer - you might take in the gardens within a hour or two drive of your home some weekend. (I've seen less than half of them myself and hope to add visits to several this summer). Happy travels. (PS - If you know of other listings I should add, please forward them to me - thanks).

ASHEBORO North Carolina Zoological Park (Including R. J. Reynolds Forest Aviary); Ms. Virginia Wall, Chief Horticulturist; Box 73, Rt. 4; Asheboro, NC 27203 (919-879-5603).

ASHEVILLE The North Carolina Arboretum; Dr. George Briggs, Director; Rt. 3, Box 1249-B; Asheville, NC 28806 (704-836-6545).

UNC-Asheville Botanical Garden; Deane R. Hamrick, President, 30 Rhododendron Drive, Arden, NC 28704.

The Biltmore Estate; Mr. William E. Alexander, Landscape Manager; One N. Pack Square; Asheville, NC 28801; (704-274-1776).

BATH John Lawson Memorial Garden; Bonner House; Bath, NC 27808; (919-575-7972).

Ruth McCloud Smith Memorial Garden; Bonner House, Rt. 92; Bath, NC; (919-923-3971).

BEAUFORT Restored Houses with Gardens on Tour: Joseph Bell House; Josiah Bell House; Apothecary Shop - all on Turner St.

BLOWING ROCK Martha Franck Fragrance Garden (N. C. Rehabilitation Center for the Blind).

BOONE Daniel Boone Native Gardens; Ms. Suzy Hearn - Supervisor/Naturalist; Horn in The West Drive; Boone, NC 28607; (704-264-6390).

CARTHAGE Sir Walter Raleigh Historical Garden; Ms. Jane McPhaul, Chairman; Horticulture Department; Sandhills Community College; 2200 Airport Road; Pinehurst, NC 28374; (919-692-6185).

CARY Hemlock Bluff Natural Area (On Kildare Farm Road from Cary through Lochmere); Mr. Wayne Mingus - Director; or Mr. Shaub Dunkley - Horticulturist; Parks & Recreation Division; Cary, NC (919-469-4061).

CHAPEL HILL The North Carolina Botanical Garden (Including - The Coker Arboretum); Dr. Peter S. White, Director; CB Box 3375, Totten Center; University of North Carolina - CH; Chapel Hill, NC 27599-3375; (919-967-2246).

CHARLOTTE Charlotte Botanical Garden Society; Dr. Pat Duncan-Grady, Director; P. O. Box 31395; Charlotte, NC 28231; (704-331-5566).

UNC-Charlotte Gardens (Including Van Landingham Glen; Susie Harwood Garden; & McMillan Orchid Greenhouse) ; Dr. Lawrence Mellichamp; Biology Department - UNCC Station; Charlotte, NC 28223; (704-547-2316 or 704-547-4055).

Wing Haven Gardens and Bird Sanctuary; Mrs. Wanny W. Hogewood, Director; 248 Ridgewood Avenue; Charlotte, NC 28209; (704-331-0664).

Hezekiah Alexander Homestead; 3500 Shamrock Drive; Charlotte, NC; (704-332-5770)

Charlotte Biblical Garden; 6311 Carmel Road, Box 2087, Charlotte, NC 28211-2087 (704-542-1403).

CHEROKEE Cherokee Botanical Garden; Oconaluftee Indian Village; Cherokee, NC; (704-497-2111)

CHERRYVILLE The Iron Gate Garden

CLEMMONS Tanglewood Arboretum and Rose Garden; Tanglewood Park; Forsyth County Park

Authority, Inc.; Clinton Ingram, Horticulturist; P. O. Box 1040; Clemmons, NC 27012-

1040; (919-766-0591).

The William and Kate B. Reynolds Memorial Park

CLYDE The Campus Arboretum of Haywood Community College (Including: The Arboretum,

Rhododendron Garden, Class of '74 Rose Garden, The Mill Pond, Nix Horticultural

Complex, and Freeland Dahlia Garden); Mr. John Palmer, Director; Haywood

Community College; Freedlander Drive; Clyde, NC 28721;(704-627-2821 X269).

DAVIDSON Davidson College Arboretum; Mr. Irvin Brawley; Box 121, Davidson College; Davidson,

NC 28036; (704-892-2000 X119).

DURHAM Sarah P. Duke Gardens; Mr. Larry T. Daniel, Associate Director; Duke University,

Durham, NC 27706; (919-684-3698).

FUQUAY-VARINA Marvin and Mary Gourd Museum and Gardens; M. M. Johnson; Box 666;

Fuquay-Varina, NC 27526; (919-639-2894).

GREENSBORO Bicentennial Garden (Between Hobbs & Holden Rds. North of Friendly Ave.);

Kathryn V. Gabel; City Beautiful Director; Drawer W-2; Greensboro, NC 27402

(919-373-2959) OR Kim Melton; City Beautiful Coordinator; Drawer W-2; Greensboro,

NC 27402; (919-373-2957).

The Greensboro Arboretum (West Market Street at Ashland Drive) Pamela A. Allen,

Chairman; Greensboro Beautiful, Inc.; Drawer W-2; Greensboro, NC 27402; (919-282-

4619) OR Mark E. Bush; Parks & Recreation Dept.; Drawer W-2; Greensboro, NC

27402; (919-373-2690).

LOUISBURG De Hart Botanical Gardens, Inc. (Formerly Greencroft Botanical Gardens); Allen and Flora de Hart; Route 1, Box 36; Louisburg, NC 27549; (919-496-4771 or 496-2521).

Franklin County Nature Preserve (Including Crane-fly Orchid Trail) Adjacent to the above

garden with access through gardens.

MANTEO The Elizabethan Gardens; Mr. Louis Midgette, Garden Superintendent; Manteo, NC

27954; (919-473-3234).

NEW BERN Tryon Palace Gardens; W. H. Rea, Horticulturist; Box 1007; 610 Pollock Street; New

Bern, NC 28560; (919-638-5109).

Restored House & Gardens on Tour:

Jones Wright Stanley House, George & Pollock Sts.

Stevenson House, George & Pollock Sts.

Stanley House, George & Pollock Sts.

Samuel Smallwood House & Garden, 520 East Front St.

PINEHURST Clarendon Gardens; Linden Rd.; Pinehurst, NC; (919-295-6651).

PITTSBORO White Pines Natural Area; Dr. Benson Kirkman; Triangle Land Conservancy; P. O. Box

13031; Research Triangle Park, NC 27709-3031; (919-833-3662).

RALEIGH The NCSU Arboretum (now the JC Raulston Arboretum); Dr. J. C. Raulston, Director; Department of Horticultural Science; Box 7609, NCSU; Raleigh, NC 27695-7609; (919-737-3132; 919-544-7475). Beryl Rd. near State Fair Grounds.

Raleigh Rose Garden (Off Gardner Street; 3 blocks from Hillsborough Street - turn at D. H. Hill Library on NCSU Campus); Raleigh Parks and Recreation Office; 241 Wade Avenue; Raleigh, NC 27607; (919-890-3285).

Pullen Park (Off Western Blvd - east of NCSU Campus) - contact address above.

Hemerocallis Society Display Garden; At the Raleigh Parks and Recreation Office; At address and listing for office above.

WRAL-TV Azalea Gardens; Mr. Craig Carpenter, Horticulturist; 2619 Western Boulevard; Raleigh, NC 27607; (919-876-1061).

Mordecai House & Gardens; Ms. Caroline Spainhour, President Capital Area Preservation, Inc.; 1 Mimosa Street; Raleigh, NC 27604; (919-834-4844).

RED SPRINGS Flora Macdonald Azalea Gardens; Flora Macdonald College; Red Springs, NC; (919-843-5441).

REIDSVILLE Chinqua-Penn Plantation; Ms. Lynn Kellar - Director; or Mr. Keith Davis - Horticulturist; Rt. 3, Box 682; Reidsville, NC 27320; (919-349-4576).

SALEMBURG Laurel Lake Gardens

SALISBURY Hurley Park; Mr. Joe Morris, Landscape Manager; P. O. Box 479; Salisbury, NC 28145-0479; (704-638-5260).

Poets and Dreamers Garden; Livingston College; Salisbury, NC 28145 (704-633-7960)

WAKE FOREST Rock Cliff Farm; B. W. Wells Association, Inc.; Mr. John Lawrence; 6015 Jeffreys School Rd.; Raleigh, NC 27612; (919-781-0335).

WILMINGTON New Hanover County Extension Arboretum; Mr. Charles E. Lewis, County Extension Chairman; 6202 Oleander Drive; Wilmington, NC 28403; (919-256-9933).

Airlie Gardens; Box 210 ; Wilmington, NC 28402; (919-763-9991).

Greenfield Gardens; Mr. Richard King; City of Wilmington Parks and Recreation Department; Box 810; Wilmington, NC 28401; (919-763-9871).

WILKESBORO Wilkes Community College Gardens; Ms. Karen Griggs, Director; P. O. Box 120; Wilkes Community College; Wilkesboro, NC 28697; (919-667-7136).

WINNABOW Orton Plantation Gardens; Mr. Kenneth M. Sprunt; RFD 1; Winnabow, NC 28479; (919-371-6851).

WINSTON-SALEM Reynolda Gardens of Wake Forest University; Preston Stockton, Superintendent; 100 Reynolda Village; Winston-Salem, NC 27106; (919-761-5593).

Old Salem Gardens; Ms. Juliianne Berckman, Horticulturist; Horticulture Department;

Salem Station, Drawer F; Winston-Salem, NC 27108; (919-721-7377).

BOOK NEWS:

The Arboretum received another excellent public review and publicizing in the April 1989 issue of House Beautiful 131(4):38, 43, 45 - The New Idea Gardens by Sydney Eddison. The article states there are 1,200 public gardens to visit in America and recommends 7 where people can see theme gardens to get ideas for their home landscapes. It's kind of nice to be nestled in between Longwood Gardens and The Chicago Botanical Garden with the comment: "a flat, unpromising scrap of land near an interstate highway, and in nine years, has turned . . . into one of the most exciting horticultural institutions in the country, with the most extensive and diverse collection of woody landscape plants in the Southeast." Wow!

The fame of Edith Eddleman and the NCSU Arboretum (now the JC Raulston Arboretum) Perennial border she has developed continues to spread. The April 15, 1989 (p. X) issue of Weekend Telegraph (3rd largest circulation in England) had an article by Mr. Stephen Lacey (following his visit to North Carolina this spring for the Davidson Horticultural Symposium) in which he talked about our perennial border and the painted grasses/flamingos motifs. He starts off the article with "American gardeners are always stimulating as they are not part of any definite tradition (?!), so you never know exactly what you will find. They design freely and use plants in unexpected ways, and the results are often wonderfully light-hearted." After describing the painted grasses he comments - "It is not quite what Miss Jekyll had in mind but she was a game old lady and would have seen the joke." And: "the flamingos are meant to ambush visitors who expect straight-laced botanic gardening, and give them a shock or a giggle - or both." He greatly admired our use of native plants in our gardening and was especially impressed by the Magnolia grandiflora and Hydrangea quercifolia. After seeing the size, vigor and quality of our evergreen magnolias he comments: "I am not sure that I will be able to look the dwarf British shrub, residing on a south wall, square in the eye again." As we suffer through our summer heat - we must remember it is only through this heat that we can enjoy the glory of our magnolias, crepe myrtles, gardenias, jasmines, etc. that cool-climate gardeners can only dream about.

Horticultural book publishing is exploding so rapidly it is impossible to even list all the new titles coming out - let alone read them and keep the nutgrass under control in the garden at the same time. Publisher's Weekly magazine reviewed this field in their February 10, 1989 issue (p. 23-26, 28, 32) in an article entitled: "The Gardening Passion". One of the strongest trends is toward American books for American gardeners. English books remain outstanding in quality - and particularly for plant cultivar descriptions and design ideas - but American environments are so different for plant performance that (outside the Pacific Northwest) many British cultural recommendations have little meaning. Regional U. S. books are also exploding with one Texas gardening guide already selling over 300,000 copies. A good article discussing the various publishers, books, and markets.

Paper Chase: Manuscript to Reprint - an article by Martin, Janick, and Evans in HortScience 23(3):439-440 (June 1988) talks about the long difficult process of publishing technical refereed journal articles today with an interesting comparison of Alfred Russel Wallace dispatching a manuscript from the remote island of Ternate in the Moluccas March 9, 1859 - it was received, read at a professional society and was in print in a journal in August. As they say: "Thus, 128 years ago, in the days of sailing ships and handset print, a manuscript sent from an obscure corner of the world took less than 6 months from manuscript to print and less than 3 months after arrival in England." Today with computers, FAX machines, and incredible reproduction technology - most scientists work one to two years on getting acceptance and publishing of a paper after it is written. The faster we run, the behinder we get.

In addition to the new books - it is a challenge to be aware of the enormous range of out-of-print past references. With all the current interest in Elizabeth Lawrence's books, the recent addition of Allen Lacy's fascinating Gardening For Love: The Market Bulletins; and another two books from or about her now in press - it was a treat and a surprise to receive a note and copywork from Susan Little which showed an extension publication Miss Lawrence wrote before her books. Gardens of the South, The University of North Carolina Library Extension Publication, Vol. XI(#2), April, 1945, 42 p. covers garden planning, gardens of the south, plants for the south, maintenance, etc. Of course it is completely out of press - but available to see at a good research library with diligent hunting if desired.

If you enjoy tracking down old out-of-print books - I would like you to add Old Herbaceous by Reginald Arkell (Harcourt Brace Jovanovich Press) to your hunt list (it will be very difficult to find). It is a sentimental, fictional view of a professional gardeners' life in England from childhood through retirement - sort of a combination of The Secret Garden and Goodbye Mr. Chjps - I cried and cried and cried (with both joy and sadness) -wonderful.

One of the hottest areas in gardening is that of perennials and it sometimes seems like a new perennials book hits the market at least every 3-4 weeks - and there are many excellent ones available. As mentioned above - many originate in climates far different than we have in the heat of the south and must be used with caution (for cultural concepts) here. An outstanding new book for our area has recently been published which has received near universal rare reviews. Perennial Garden Color - For Texas and the South by Dr. William C. Welch (1989, 268 p., over 500 color photographs - \$29.95 from Taylor Publishing Company, 1550 W. Mockingbird Lane, P. O. Box 597, Dallas, TX 75221). Dr. Welch is the Texas state extension landscape specialist with Texas A&M University - and a rare academic with a Ph.D. and landscape architectural training - as well as an active and avid hands-on gardening participant. In addition to the 125 perennials covered, he also writes about over 100 types of old garden roses which are perfect compliments to perennials in garden use.

Quotes from American Conifer Society Bulletin (Spring 89 - 6(4):82-85).

"If I knew I was going to die tomorrow, I would plant a tree today." Martin Luther

"As we worry about how time will happen; seeds germinate, trees grow, and the world becomes." David Pilz.

From Organic Gardening:- March 1984.

Great oaks from acorns eventually grow

If the conditions are right.

Great weeds from little gardens grow,

But that happens overnight. (Mary Glines)

For those interested in public gardens - the American Association of Botanical Gardens and Arboreta has published The Plant Collections Directory: Canada and the United States, edited by Jean H. Schumacher. (1988, 158 p., \$20 (members) or \$25 (non-members), available from AABGA, P. O. Box 206, Swarthmore, PA 19081). 119 gardens are listed by state and province with contact information; institutional purpose; environmental parameters (which I find useful in looking at adaptation of plants); facilities, and data on the collections.

The Pacific Northwest suffered a horrible blow this past winter with temperatures below zero in many areas where it rarely goes below 15F, high winds and bright sun - with the damage to plants one would expect from such deviations from the norms of that area. The Arboretum Foundation of the Washington Park Arboretum (University of Washington, Seattle) conducts a huge sale each spring to raise funds for the gardens - and I felt the following editorial in their sales catalog expressed as well as anything the emotions we feel with such loss - and the appropriate way to proceed.

"THE DREAM IS ALIVE - THOUGH MANY OF YOUR PLANTS MAY NOT BE.

Even before the fell Great Frost darkened our gardens, we were anticipating a terrific sale. Now, sadly, we all have far too many new openings to fill, and the sale takes on a whole new importance as we look for appropriate replacements for the dear departed.

As the arctic cold lay heavily over the Northwest this winter, unhappy gardeners mourned their dead most bitterly. It is always difficult to lose our particular favorites, hand raised and cosseted to perfection. It is horrid to watch a promising new garden crumble into black mush, never to fulfill our fondest hopes. It hurts to see a well grown shrub approaching triumphant maturity cut down to kindling in a night. However, there is always hope - we may find hope even in destruction, as the English found it in the aftermath of the freak storm that devastated Kew and the countryside alike. After all, gardeners are practised in the patience that rejoices in raising a tree from seed to sapling into majestic maturity. Gardeners know the art of waiting, of savoring the future while enjoying the imperfect pleasures of the present as best we can. So our gardens are going to look like hell on earth for a while; as Abraham Lincoln liked to remind us, "The key to happiness is the ability to overlook." With patience and care, our gardens and our visions will be renewed.

The February blitz was not without a bright side. We will learn a good deal from our survivors, as well as our dead. The cold mapped out with frightful clarity the exact worth of the microclimates in every yard. Perhaps some of us will turn our backs on those enticing borderline beauties, the tender ones that flew on angelic wings from our gardens overnight. Others will stubbornly replant, feeling - rightly, I think - that wonderful plants are always worth a risk. Best of all, consider that space we now have for new plants. Here's an opportunity to try out plants that have always fascinated us. Perhaps we could never figure out where to site a particular tree or shrub. Lots of choices now. . . Those of us who groan that there is no place to tuck in recent acquisitions will find room for all sorts of new treasures. If so many of the old have disappeared into the black hole of Alaskan wind and frost, well then, on with the new!"

Timber Press is a national treasure for their encouragement of authors and publishing of an enormously varied array of excellent horticultural and botanical books of all kinds. When I first saw their new book Personal Landscapes by Jerome Malitz and noted the author was a mathematics professor at the University of Colorado in Boulder, Colorado - I had my doubts about how useful or interesting I would find the book. How wrong I was (mathematics in the garden is soundly dismissed on p. 21) and what a delight it is - a four star wonder offering excellent photography, diverse horticultural information, personal and philosophical observations, and perhaps most rare in horticultural books - great biting humor as well. So much writing today is edited to a consistency of pabulum and often feels like it came from that great generic style-manual computer in the sky. Not so with this book - there is no question where Dr. Malitz stands on any issue and he uses marvelous humor in expressing it - e. g. "(speciality plants) The dwarf conifers comprise an enormous group of plants with a wildly avid following. Nowhere in the plant kingdom do we find so much love and attention lavished on a bunch of genetic- or virus-induced freaks."; "(pest control) Lion dung has been suggested as a bunny and deer repellent by our local animal control agent. These are such practical people."; "(plant shaping) For those with kinkier tastes, there are trees that can be debased by knotting the trunk or limbs, coiling the trunk like a gigantic spring, or braiding several trunks together. I don't know why people do this sort of thing except that they can, and maybe it keeps them from doing it to other people."; "(indulge) I'm a plant junkie, and have to be constantly on guard against the addiction. Every new nursery, every new catalog puts me on the edge of control. I develop an overwhelming desire to collect every species that might be hardy here or might survive given a heroic measure of life support and to hell with garden design."; and one of my favorite vivid word images: "An espalier is a tree grown splat against the wall."

As an example of the true originality of the book - he has a fascinating chapter (wishbook) about the goals plant breeders might achieve (particularly if part of the enormous energy devoted to developing another thousand new cultivars annually of certain popular garden plants could be channeled to totally untouched plants) with many examples. As he ends the chapter with the promises of genetic

engineering, he deftly proposes creation of a truly original series of new bigeneric hybrids - e.g. combining the balloon flower, *Platycodon* with the gas plant, *Dictamnus* to provide a plant that would generate gas to fill and float the balloon so the plant wouldn't need staking!; and my favorite - the X Pacayote (*Payote X Cayote*) - "producing a hairy cactus that howls at the moon, and with good reason".

Though I've emphasized the humor here (because it is so rare in horticulture) - the book offers excellent advice in the philosophy of garden creation, design concepts, plant habitat needs, and good recommended plants (for all climates - not just Colorado). I love it - highly recommended. 272 p., 132 color photographs - \$39.95 plus shipping and handling from Timber Press, 9999 SW Wilshire, Portland, OR 97225 (1-800-327-5680).

Another outstanding Timber Press book has been on my desk for the last year waiting for the promotion I feel it deserves. Where lilacs can be grown successfully, they are one of the most popular of shrubs - and one of the most missed when people move from such areas to those where they are not used. *Lilacs - The Genus Syringa* by Fr. John L. Fiala (1988, 266 p., \$59.95, address above) is the complete detailed guide to these wonderful plants - botany, horticulture, hybridizing, culture, problems, etc. Unfortunately, many cannot be grown in the south and perhaps the only major omission of the book is not including a discussion of low chilling/heat tolerant species and hybrids. Admittedly, little research and formal evaluation has been done in the south to provide documentation data for such a presentation. However, in spite of detailed hybridizer information and lists of cultivars - the extensive work done in California to produce low chilling, heat-tolerant types like 'Lavender Lady', etc. is not mentioned - somewhat surprising since the author now lives in Florida in retirement. This is a minor regional quibble and should not detract from a wonderful book. If I were "arboretuming" or gardening in the western part of the state I'd have acres of hundreds of cultivars. (Note - the last issue of *Arnoldia* just had an article by John Alexander III "The Quest for the Perfect Lilac" which listed their evaluation of the best 50 cultivars of *Syringa vulgaris* and the ten best uncommon species/hybrid lilacs.)

In the #18 newsletter I wrote about a Dutch book listing correct names of nursery plants (*Naamlijst van Houtige Genassen*) and gave an address in Holland to obtain it. Timber Press wrote and indicated they now have it for sale in their catalog - "we are carrying the book in our catalog for reasons not only of its great utility to nurserymen in helping getting labelling straight but also out of personal respect (for the authors)."

A huge listing of landscape reference books is available from the Landscape Architecture Bookstore, P. O. Box 6525, Ithaca, NY 14851 (1-800-666-2211). Hundreds of books from City Gardening to Fountains & Pools to Southern Plants. Great!

I've long wanted to promote my all-time favorite bookstore of North Carolina. Malaprop's Bookstore/Cafe, 61 Haywood St., Asheville, NC 28801 (704-254-6734) is a tiny store just a couple of doors down from the Asheville Civic Center downtown and undoubtedly has more superb, fascinating books per foot of bookshelf than any other bookstore I know. I can browse for hours there and find it impossible to go away without purchasing a pile of books even though I steel myself each time before entering ("You don't need any books; you can't afford any books; you absolutely cannot buy any books this time) - all to no avail. As in truly civilized bookstores - you can also go downstairs for a cup of tea (or more importantly, wonderful desserts) with soothing, elegant music. Sigh - for such a place in Raleigh!

"I arise in the morning torn between a desire to improve (or save) the world and a desire to enjoy (or savor) it. This makes it hard to plan the day." E. B. White.

An earlier newsletter talked about paperback mystery novels from England with horticultural themes by John Sherwood. His heroine, Celia Grant is back wandering through Gertrude Jekyll's designs in search of a murderer in *The Mantrap Garden*.

Christopher Lloyd continues to write prolifically and is well on the way to creating the possibility of a one-author complete horticultural library - and for that, gardeners and those who like to read about plants are eternally grateful. His "newest" book (with 1965, 1977, and 1979 editions - but heavily revised in this new 1989 U. S. edition published by Capabilities), *Clematis*, exhaustively covers a most popular group of garden flowering vines. (216 p., \$32.50, from Capability's Books, P. O. Box 114, Deer Park, WI 54007 - 1-800-247-8154). Capability's is to be congratulated on including in the book a listing of eight U. S. mail-order nurseries which carry clematis for sale. The ultimate frustration is to be given a lustful hunger for a delectable plant and no clue as to how to get it (something, thankfully I of course have never done in my life!).

The next quote is probably too long to include here - but it has long been in my file and with each newsletter I reread it and say once again - oh yes, how true - I want to share it. So we'll get it out of the stack. It is a short segment of a larger article promoting the concept of developing an agricultural school in New York (which was eventually done - forming Cornell University) - published in *The Horticulturist*, Dec. 1849, Vol. 4(6):249-252. (Pardon the gender discrimination of the 1800's).

"Agriculture is both a science and an art. It may be studied in the closet, the laboratory, the lecture room; so that a man may have a perfect knowledge of it in his head, and yet not know how to perform well a single one of its labors in the field; or it may be gained by rote in the fields, by one who cannot give you the reason for the operation of a single law of nature which it involves. The first is mere theory - the second, mere practice.

It is easy to see, that he who is only a theorist is no more likely to raise good crops profitably, than a theoretical swimmer is to cross the Hellespont like Leander; and that the mere practical farmer is as little likely to improve on what he has learned by imitation, as his horse is to invent a new mode of locomotion.

The difference of opinion, regarding the nature or the province of an agricultural school, seems mainly to grow out of the different sides from which the matter is viewed - whether the advocate favors science or practice most, - forgetting that the well educated agriculturist should combine in himself both the science and the art which he professes.

The difference between knowledge and wisdom is nowhere better illustrated than in a mixed study, like agriculture. Knowledge may be either theoretical or practical; but wisdom is "knowledge put in action". What the agricultural school, which this age and country now demands, must do to satisfy us, is to teach - not alone the practice of the fields, but that which involves both, and which can never be attained without a large development of the powers of the pupil in both directions. His head and hands must work together. He must try all things that promise well, and know the reason of his failure as well as his success.

To this end, he must not be in the hands of quack chemists and quack physiologists in the lecture halls, or those of chimeral farmers or dull teamsters in the fields. Hence, the state must insist upon having, for teachers, only the ablest men; men who will teach wisely, whether it be chemistry or ploughing, - teach it in the best and most thorough manner, so that it may become wisdom for the pupil. Such men are always successful in their own sphere and calling, and can no more be had for the asking than one can have the sun and stars. They must be sought for and carried off by violence, and made to understand that the state has a noble work for them, which she means to have rightly and well done. "

(And we feel it is well done in the Horticultural Science Department at NCSU with some 16 "Outstanding Teacher" honors being awarded to faculty of our department!)

Among the best sources of information on contemporary research and use of trees are the proceedings of the Metropolitan Tree Improvement Alliance. The 6th national conference was just held in Mentor, Ohio and proceedings of that (and all previous) meeting(s) is(are) now available for \$5 (plus \$2 mailing) from: Mr. Andrew P. Todd, Ohio Department of Natural Resources, Fountain Square, Columbus, OH 43224.

We have long supported the active movement for promotion of the use of native plants in landscaping - and there is an explosion of symposia, books, etc. emerging on the subject. A new periodical is now available - Native Notes - A Newsletter Devoted to Landscaping with Native Plants. Issued 4 times a year (the issue I saw was 18 pages) - \$10 per year from Native Notes, Rt. 2, Box 550, Heiskell, TN 37828. Make check payable to Bluebird Nursery.

Another such guide is: Wildflower Handbook: The National Wildflower Research Center's Guide to Landscaping With Native Plants - 320 p., \$9.95, Texas Monthly Press, 2600 FM 973 North, Austin, TX 78725 (512-929-3600).

Little current literature deals with commercial production of cut-flowers (as pot plants and foliage plants have dominated recent decades). A new proceedings from a 1988 symposium is now available - "Commercial Field Production of Cut and Dried Flowers" - \$20 from University of Minnesota Extension Service, Special Programs, 405 Coffey Hall, 1420 Eckles Ave., University of Minnesota, St. Paul, MN 55108. (There is now a professional society for those involved in this field - Association of Speciality Cut Flower Growers, P. O. Box 2796, Friday Harbor, WA 98250.)

We've talked about speciality plant society newsletters - the ultimate specialization may exist with a society devoted to Ginkgo! To receive the "Irregular Newsletter" (what a title for me to use if it wasn't already taken) from the International Golden Fossil Tree Society - send \$2 for an annual subscription to Mr. Clayton Fawkes, 201 West Graham Avenue, Lombardy, IL 60148.

Another organization - of much wider scope and goals - has recently been founded with the purpose of "saving" significant American private gardens which have been created by individuals to preserve them for future generations enjoyment - something on the model of the National Trust in England which has preserved such gardens as Sissinghurst, Nymans, etc. It is a most worthy project and those interested in receiving the literature can write to: The Garden Conservancy, Box 219, Main Street, Cold Spring, NY 10516. There are various levels of contribution and checks should be made payable to: The Tides Foundation/Garden Conservancy.

For used and old horticultural and gardening books - a new source to me: Anna Buxton Books, Redcroft, 23 Murrayfield Rd., Edinburgh EH12 6EP Scotland. \$10 for next two years of catalogs listing hundreds of books available.

New Books Not Seen Which Sound Interesting and/or Useful:

Enduring Seeds by Dr. Gary Nabhan (1989, p., \$18.95 from North Point Press, 850 Talbot Ave., Berkeley, CA 94706 - 415-527-6260). Discusses disappearing plant diversity, use of native American plants for food, stories of specific plants, and ways to protect and save old culture agricultural plants.

Growing With Gardening by Bibby Moore (1988, 234 p., \$14.95 soft, \$29.95 hard from University of North Carolina Press, P. O. Box 2288, Chapel Hill, NC 27515-2288 - 919-966-5722). Covers the ways horticultural plants and activities can be used for therapy, recreation and education with rave reviews by various authors and organizations including the 1988 Publication Award of the American Horticultural Therapy Association. Coming from The North Carolina Botanical Garden program - yet another example of the excellence now present in the N. C. public garden field.

Kids Gardening: A Kid's Guide to Messing Around in the Dirt by Kevin Raftery and Kim Gilbert Raftery (1989, 87 pages plus 15 varieties of seed, 6"X9". \$12.95 + \$2 handling, from Science News Books, 1719 N Street, NW, Washington, DC 20036). Designed for any place (indoors or out), any season, any climate, any kid.

Outwitting Squirrels: 101 Cunning Stratagems to Reduce Dramatically the Egregious Misappropriation of Seed From Your Birdfeeder by Squirrels by Bill Adler, Jr. (\$8.95 from Chicago Review Press, 814 N. Franklin St., Chicago, IL 60610). Surely the title says it all.

Clues to American Garden Styles by David Fogle, Catherine Mahan, and Christopher Weeks (1988, 64 p., \$6.95 from Starhill Press, P. O. Box 32342, Washington, DC 20007) - described as "the Cliff Notes on garden design" with brief notes on all the identifiable American garden styles from the Farmstead garden to the Postmodern Landscape. Sounds like a useful reference for those studying design history (useful for ASLA certification exams?) for a quick synopsis.

A Guide to Herbaceous Perennial Gardens in the United States - from the Perennial Plant Association. Contact: Caroline T. Kiang, Cooperative Extension Agent, Cornell Cooperative Extension - Suffolk County, 246 Griffing Avenue, Riverhead, NY 11901 (516-727-7850).

Four general interest books are described in a folder from: Paj Publications, c/o Maxway Data Corporation, 225 West 34th St., NYC, NY 10001. American Garden Writing edited by Bonnie Marranca offers a collection of 50 excerpts from assorted writing from the Colonial period to the present. 336 p. - \$23.95. The Gardener's Bed-Book (348 p. - \$20.95) and The Gardener's Day Book (384 p. - \$23.95) by Richardson Wright contain short essays and philosophy from personal gardening experience for light pleasure reading. The Plant Hunters by Tyler Whittle (286 p. - \$13.95) narrates the stories of plant hunters through the ages who have traveled, collected, and introduced plants to cultivation. I yearn for time to read them all.

PLANT SOURCES

NORTH CAROLINA SPECIALITY PLANT MAIL-ORDER NURSERIES - 1989

During the last few weeks I've been talking to editors of American Nurseryman magazine and referring them to various firms around North Carolina as they prepare an article for publication on the speciality nurserymen of this state. During the past ten years or so our state has attracted from out-of-state or developed locally a rather remarkable array of nurserymen producing an enormous variety of plants which would not have been found anywhere in the state in the 70's. In addition, the speciality mail order businesses have rapidly developed to the point North Carolina has a surprisingly disproportionate number of the firms compared to what would be expected from our population and nursery tradition. Although I've written about many of these firms in previous issues of the newsletter, and have them included in our continually evolving sources list - I felt it would be useful and informative to produce a list of "our" mail order nurseries (of which we are so proud) which could continually be updated for distribution. In doing so I have "discovered" firms new to me which sound fascinating and subjects for future visits. It is likely that over 10,000 different kinds of seed and plants can be obtained from these firms (and a possible future project is to develop such a listing of those available and their sources). All these small speciality nurseries are owned and operated by friendly, wonderful people who pride themselves on quality plants with honest, proud service for their customers. Support them, and experiment with some new plants in your garden. Let your postman bring you a few thousand new plants. (Note - other mail order firms exist in N.C. but only those handling plants for outdoor garden ornamental use have been included here. Also - only those firms selling nursery propagated native wildflowers have been included).

Camellia Forest Nursery - Cliff and Kai Mei Parks, 125 Carolina Forest Rd., P. O. Box 291, Chapel Hill, NC 27514 (919-967-5529). A diverse range of plants - most exceptional for their extensive list of uncommon Camellia hybrids and species; and for their exotic listing of many very rare Asian trees and shrubs - many not available from any other nursery in the U.S. Cardinal Nursery - Bill & Barbara Storms, Rt. 1, Box 316, State Road, NC 28676 (919-874-2027).

Specializing in Rhododendron hybrids with over 200 different ones listed. Donnelly's Nursery - Russell Donnelly, Rt. 7, Box 420, Fairview, NC 28730 (704-298-0851) (SASE for Catalog). Specializing in Hosta and Ivies.

Holbrook Farm and Nursery - Allen Bush, Rt. 2, Box 223B, Fletcher, NC 28732 (704-891-7790). An outstanding operation specializing in uncommon perennials (many recent European cultivars); native plants and flowering shrubs. Allen interned at Kew Gardens and stays in constant touch with the current German nursery developments (including a visit last year to acquire new plants).

Jernigan Gardens - Bettie Jernigan, Rt. 6, Box 593, Dunn, NC 28334 (919-567-2135). (SASE for Catalog). Extensive listings of collector daylilies, iris, and hostas. In addition, many perennials are available at the nursery which are not in the catalog.

Lamtree Farm - Lee A. Morrison, Rt. 1, Box 162, Warrensville, NC 28693 (919-385-6144). Originally started as a Christmas tree seedling transplant business and more recently diversifying to handle limited mail order business with native tree and shrub seedlings. Lee is a former student and good friend and I fondly remember a visit to his nursery in this beautiful isolated mountain cove about as far west and north as you can go and remain in the state. He's currently specializing in the rare Franklinia with plants of many sizes available.

Little River Farm - Keith Bohn and Mel Oliver, Rt. 1, Box 174, Middlesex, NC 27557 (919-965-9507). Another young nursery with extremely rapid growth and I was astonished at their recent catalog and its changes since my visit to the nursery just two years ago. The nursery began with Keith's interest in tropical plants and early sales of a variety of banana trees for garden bedding out. Today the list includes a wide array of all kinds of garden plants - with perhaps greatest concentration on perennials. Have got to get by for another visit!

Montrose Nursery - Nancy Goodwin (with Doug Ruhren and Rich Hartlage), P. O. Box 957, Hillsborough, NC 27278 (919-732-7787). (\$1.50 catalog). This operation began with nursery production of seed-propagated Cyclamen corms to counter the problem of imported, wild-collected corms threatening native populations in Europe, Africa, and the Middle East. Today the widest range of hardy Cyclamen

available from any nursery in the world is offered in the catalog. In addition, the nursery has expanded rapidly in recent years with ever-increasing lists of fine perennials - including many local or heritage cultivars not available elsewhere. The grounds of the home and nursery also contain some of the finest woody plants in North Carolina with plantings dating from the mid-1800's.

Niche Gardens - Kim and Bruce Hawks, 1111 Dawson Road, Dept. R., Chapel Hill, NC 27516 (919-967 0078). (\$3 catalog). This young nursery is expanding rapidly with a doubling of their listings each year it seems. They specialize in nursery-propagated southeastern U. S. native plants as well as a wide range of garden perennials and grasses. In addition to their mail-order business they also contract with landscape firms and national mail order firms to produce special plants as requested. Both are excellent plantsmen, and avid arboretum supporters who never miss a function.

Passiflora - Denise E. Blume, Rt. 1, Box 190-A, Germanton, NC 27019 (919-591-5816). (\$1 catalog). Specializing in wildflower seed for naturalizing or for the garden - either as individual species or in mixtures. With the current great interest in native wildflowers and the extensive programs of the N. C. highway department in using wildflowers on our roads - many gardeners are hunting for such seed sources.

Powell's Gardens - Loleta Powell, Rt. 3, Box 21, Princeton, NC (919-936-4421). (\$2.50 catalog) This is the original parent N. C. mail order business in business for decades now. Originally starting from an iris breeding hobby, then through daylilies, into hosta and ferns, sedums and sempervivens, to dwarf conifers, perennials and virtually every other plant which can be grown in N. C. - an amazing listing of thousands of items; an amazing woman who never stops working and accomplishes three times that of any mortal person; and an incredible collection of plants in a garden around the house to observe on personal visits.

Rasland Farm - Sylvia Tippett, NC 82 at US 13, Godwin, NC 28344 (919-567-2705). (\$2 catalog). A wide selection of herbs and scented geraniums as well as associated herb products.

Sandy Mush Herbs - Fairman Jayne, Rt. 2, Surret Cove Rd., Leicester, NC 28748 (704-683-2014). (Catalog/Handbook \$4). Another of the nurseries that I regrettably have not yet visited. Many friends have spoken of it in glowing terms and I send all visitors to the western part of the state to see it. An amazing listing of herbs (how can there be so many Thymes?), and many fine perennials. Anyone who visits the operation forever after talks about the experience of finding the place and the site where it is located. There is "remote", and there is "isolated" - and then there is Sandy Mush! At the end of the road, and up the mountain to the end of the world - and it is wonderful!

The Gathering Garden - Orus (Bill) Barker, Jr., Rt. 1, Box 41-E, Efland, NC 27243 (919-563-6595). Although in business now for 8 years and not far away - I regret to say I have not visited this fine firm I hear so much (all good) about. Their recent catalog has increased by 100 new items bringing it to over 600 types of herbs, flowering perennials, wildflowers, groundcovers and ornamental grasses.

The Seed Source - Majella Larochelle and Vee Sharp, Rt. 68, Box 301, Tuckaseegee, NC 28783 (704-298-4751). (\$2 Catalog). Majella and Vee moved to N. C. from Seattle, WA a few years ago - and they have re-established and expanded their remarkable operation as seedmen. If one considers seed as plants (which they certainly are in miniaturized casules) - with over 6,000 listings, this operation unquestionably sells the widest variety of plants of any nursery in the southeastern U.S. - and possibly in the U.S. Separate lists are available for alpiners, bulbs, ornamental grasses, herbs, wildflowers, perennials, and trees & shrubs. They also publish information sources of interest to plantsmen.

The Wildwood Flower - Thurman Maness, Rt. 3, Box 165, Pittsboro, NC 27312 (919-542-4344). (SASE for catalog). A good selection of nursery propagated native wildflowers and ferns including hybrid lobelias originating at the garden.

Vine & Branch Nursery - Stephen and Rhonda Burns, 2611 Cascadilla St., Durham, NC 27704. (919-477- 2967) Not truly a mail order business in the strictest sense as they are primarily propagation specialists for the wholesale nursery trade. However, as a part of their business they are producing the largest range of Cercis (redbuds) of any nursery in the world - and have a listing of Cercis species and cultivars which they will sell by mail order on special request.

Washington Evergreen Nursery - Jordan Jack, P. O. Box 388, Brooks Branch Road, Leicester, NC 28748 (704-683-4518 April/October; 803-747-1641 November/March). (\$2 catalog). One of several nurseries which were established as fine businesses elsewhere in the U.S., and moved to N. C. to enjoy all the climatic and cultural pluses of this area (we'll forget the record freezes, frosts, heat, and drought you've encountered since your move Jordan!). A wonderful listing of dwarf conifers, as well as many Rhododendron and 26 different Kalmia.

We-Du Nursery - Dick Weaver and Rene Duval, Rt. 5, Box 724, Marion, NC 28752 (704-738-8300). A Northeastern U.S. conceived, but N. C. born nursery with some of the most remarkable plants for sale of any nursery in the country. Dick Weaver was the plant propagator for a little Boston garden (which some of you may have heard of - The Arnold Arboretum. I understand they have some trees.) and wanted to have the pleasure of his own garden and business operation. In moving to N. C., and settling in Polly Spout (a yuppie suburb of metropolitan Marion) - they have found a special paradise. With contact through Index Seminum of botanical gardens around the world - incredible rarities of plant species never grown in nurseries in the U.S. before are offered for sale. They also handle rock garden plants, bulbs, Japanese specialities, and on and on. Each year's list changes depending on recent receipts in seed so there are always new discoveries and once-only offerings. No visit is complete without seeing the exotic birds and animals which increase in number and diversity each year. No serious plantsman comes to N.C. without a visit to the nursery.

OTHER ASSORTED PLANT SOURCES:

The following could go either in the books or sources section - but will put it here as the best of the many sources information items I have for this issue. The Brooklyn Botanical Garden has just published *Perennials: A Nursery Source Manual* - by editors Nancy Gorkin, Barbara Pesch, Charles Gabeler, and Jo Keim. It is Handbook #118, winter 1988/89, Vol 44(4) of the *Plants & Gardens* series members receive through membership in the Brooklyn Botanical Garden - \$20 per year from 1000 Washington Ave, Brooklyn, NY 11225. In 176 pages of varied listings (shade perennials, sun perennials, herbs, ferns, etc.) - thousands of plant listings keyed to specific catalog sources are given. It will be an invaluable source for gardeners and in the future will certainly be sold where Brooklyn Botanical Garden books are available; as well as by mail from the garden.

Another speciality listing which will lead one to a vast array of other materials is the *Fruit, Berry and Nut Inventory* - a comprehensive inventory of 248 mail-order nursery catalogs. The 366 page, 6"x9" book contains descriptions of 4,140 fruit, berry and nut varieties, and a coded list of every U. S. company that offers each one. Available for \$19 (softcover) or \$26 (hardcover) from Seed Savers Exchange, RR#3, Box 239, Decorah, Iowa 52101. Seed Savers Exchange is a nonprofit, tax exempt organization saving old-time vegetable and fruit varieties from extinction. Revenues from this book are helping to develop a Heritage Farm that will maintain and display organic gardens containing over a thousand endangered vegetables, historic orchards of several hundred 19th century apples, and rare poultry and livestock breeds.

A nursery I very much want to see at the earliest opportunity is Fern Valley Farms, Off 421 Service Road, Yadkinville, NC 27055 (919-463-2412) run by Mr. Tom C. Clark. He is specializing in nursery-propagated and container-grown native plants; with the most exciting find of a source for the very rare and choice native *Stewartia malachodendron* - the most beautiful (and difficult to grow) of the *Stewartias* with purple stamens against the white petals. Again no mail-order and one should call before visiting. Many other choice items.

NEW PLANTS RECEIVED BY THE NCSU Arboretum (now the JC Raulston Arboretum) - JANUARY-JUNE 1989

89/0001 - *Cornus kousa* 'Elizabeth Lustergarten' - Dr. Tom Krenitsky (?), ?, 4' Graft - 01/02

89/0002 - *Cornus kousa* '?' - Dr. Tom Krenitsky (?), ?, 4' Graft - 01/02.

89/0003 - *Acer mandshuricum* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seed - 01/04

89/0004 - *Acer monspessulanum* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seed - 01/04.

89/0005 - *Berberis tibetica* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seed - 01/04.

89/0006 - *Prunus padus* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seed - 01/04.

89/0007 - *Prunus spinosa* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seed - 01/04.

89/0008 - *Quercus libani* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seed - 01/04.

89/0009 - *Cryptomeria japonica* 'Gyokauya' - Miniature Plant Kingdom - Sebastopol, CA - 1' - 02/20.

89/0010 - *Cryptomeria japonica* 'Globosa Nana' - Miniature Plant Kingdom - Sebastopol, CA - 1' - 02/20.

89/0011 - *Cryptomeria japonica* 'Lobbi' - Miniature Plant Kingdom - Sebastopol, CA - 5" - 02/20.

89/0012 - *Cryptomeria japonica* 'Lobbi Nana Aurea' - Miniature Plant Kingdom - Sebastopol, CA - 3" - 02/20.

89/0013 - *Hakonechloa macra* - Miniature Plant Kingdom - Sebastopol, CA - Division - 02/20.

89/0014 - *Nandina domestica* 'Akame' - Miniature Plant Kingdom - Sebastopol, CA - 4" - 02/20.

89/0015 - *Nandina domestica* 'Aochirimen' - Miniature Plant Kingdom - Sebastopol, CA - 3" - 02/20.

89/0016 - *Nandina domestica* 'Aome' - Miniature Plant Kingdom - Sebastopol, CA - 2" - 02/20.

89/0017 - *Nandina domestica* 'Pygmea' - Miniature Plant Kingdom - Sebastopol, CA - 2" - 02/20.

89/0018 - *Nandina domestica* 'Senbazuru' - Miniature Plant Kingdom - Sebastopol, CA - 3" - 02/20.

89/0019 - *Nandina domestica* 'Shirochirimen' - Miniature Plant Kingdom - Sebastopol, CA - 2" - 02/20.

89/0020 - *Nandina domestica* 'Soga Ikada' - Miniature Plant Kingdom - Sebastopol, CA - 2" - 02/20.

89/0021 - *Nandina domestica* 'Tamahime' - Miniature Plant Kingdom - Sebastopol, CA - 3" - 02/20.

89/0022 - *Nandina domestica* 'Tama Shishi' - Miniature Plant Kingdom - Sebastopol, CA - 2" - 02/20.

89/0023 - *Nandina domestica* 'Tamazuru' - Miniature Plant Kingdom - Sebastopol, CA - 3" - 02/20.

89/0024 - *Nandina domestica* 'Tancho' - Miniature Plant Kingdom - Sebastopol, CA - 3" - 02/20.

89/0025 - *Nandina domestica* 'Tancho Zusu' - Miniature Plant Kingdom - Sebastopol, CA - 3" - 02/20.

89/0026 - *Rhododendron* (Az) 'Garbrielle Hill' - Miniature Plant Kingdom - Sebastopol, CA - 4" - 02/20.

89/0027 - *Rhododendron* (Az) 'Mount Seven Star' - Miniature Plant Kingdom - Sebastopol, CA - 2" - 02/20.

89/0028 - *Rhododendron* (Az) 'Suzannah Hill' - Miniature Plant Kingdom - Sebastopol - 5" liner - 02/20.

89/0029 - *Buxus balearica* - C. Klyn & Co. - Boskoop, Holland - 4" liner - 02/25.

89/0030 - *Cupressocyparis leylandii* 'Gold Rider' - C. Klyn & Co. - Boskoop, Holland - 3' - 2/25.

89/0031 - *Gleditsia triacanthos* 'Elegantissima' - C. Klyn & Co. - Boskoop, Holland - 5' - 02/25.

89/0032 - *Hamamelis X intermedia* 'Barmstedt Gold' - C. Klyn & Co. - Boskoop, Holland - 4' - 02/25.

89/0033 - *Hamamelis X intermedia* 'Nina' - C. Klyn & Co. - Boskoop, Holland - 4' - 02/25.

89/0034 - *Hamamelis X intermedia* 'Sunburst' - C. Klyn & Co. - Boskoop, Holland - 4' - 02/25.

89/0035 - *Hamamelis X intermedia* 'Vezna' - C. Klyn & Co. - Boskoop, Holland - 2' - 02/25.

89/0036 - *Hedera helix* 'Humpty Dumpty' - C. Klyn & Co. - Boskoop, Holland - 6" - 02/25.

89/0037 - *Liquidambar styraciflua* 'Pendula' - C. Klyn & Co. - Boskoop, Holland - 4' - 02/25.

89/0038 - *Neillia affinis* - C. Klyn & Co. - Boskoop, Holland - 3' - 02/25.

89/0039 - *Neillia thibetica* - C. Klyn & Co. - Boskoop, Holland - 3' - 02/25.

89/0040 - *Pieris japonica* 'Nocturne' - C. Klyn & Co. - Boskoop, Holland - 1' - 02/25.

89/0041 - *Pieris japonica* 'Toccata' - C. Klyn & Co. - Boskoop, Holland - 1' - 02/25.

89/0042 - *Stachyurus praecox* 'Matsuzaki' - C. Klyn & Co. - Boskoop, Holland - 1' - 02/25.

89/0043 - *Cornus officinalis* 'Kintoki' - Morris Arboretum - Philadelphia, PA - 3" - 02/26.

89/0044 - *Enkianthus sikokianus* - Morris Arboretum - Philadelphia, PA - 3" - 02/26.

89/0045 - *Acer pensylvanicum* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0046 - *Betula grossa* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0047 - *Cotoneaster dammeri* 'Ickles' - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0048 - *Cupressus torulosa* - Coles Nursery - Furlong, PA - 8" Liners - 02/27.

89/0049 - *Disanthus cercidifolius* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0050 - *Eleagnus ebbingei* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0051 - *Escallonia virgata* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0052 - *Hibiscus hamabo* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0053 - *Ilex opaca* 'Norden's Gold' - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0054 - *Juniperus thurifera* 'Nana' - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0055 - *Prunus lusitanica* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0056 - *Prunus padus* 'Purpurea' - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0057 - *Rhamnus frangula* 'Asplenifolia' - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0058 - *Viburnum integrifolia* - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0059 - *Viburnum nudum* (Pollinator) - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0060 - *Viburnum nudum* 'Winterthur' - Coles Nursery - Furlong, PA - Liner - 02/27.

89/0061 - *Eleagnus pungens* 'Chirifu' (NA39425) - U. S. Nat. Arb. - Washington, DC - Cuttings - 02/27.

89/0062 - *Salix chaenomoides* (?) - U. S. National Arboretum (?) - Washington, DC - Cuttings - 02/27.

89/0063 - *Berberis thunbergii* 'Silver Mule' - Richard Hartlage - Raleigh, NC - Liner - 03/03.

89/0064 - *Millium effusum* 'Aurea' - Richard Harlage - Raleigh, NC - Division - 03/03.

89/0065 - *Plione formosana* - Richard Harlage - Raleigh, NC - Division - 03/03.

89/0066 - *Lagerstroemia indica* 'Summer & Summer' - Hokuetsu Noji Co., Ltd. - Japan - Liners - 03/03.

89/0067 - *Buxus sempervirens* 'Graham Blandy' - Orlando E. White Arb. - Boyce, VA - (2)15" - 03/06.

89/0068 - *Caryopteris* 'Longwood Blue' - Wayside Gardens - Hodges, SC - Qt. - 03/15.

89/0069 - *Buddleia* 'Pink Delight' - Wayside Gardens - Hodges, SC - Qt. - 03/15.

89/0070 - *Deutzia* 'Rosealind' - Wayside Gardens - Hodges, SC - Qt. - 03/15.

89/0071 - *Lonicera* 'Graham Thomas' - Wayside Gardens - Hodges, SC - Qt. - 03/15.

89/0072 - *Vallotia speciosa* - Wayside Gardens - Hodges, SC - bulbs - 03/15.

89/0073 - *Chlidanthus* - Wayside Gardens - Hodges, SC - 3 bulbs - 03/15.

89/0074 - *Babiana stricta* - Wayside Gardens - Hodges, SC - 5 bulbs - 03/15.

89/0075 - Hardy Ginger - UBC Botanical Garden - Vancouver, BC - Division - 03/28.

89/0076 - *Cryptomeria japonica* 'Elegans Aurea' - UBC Bot. Garden - Vancouver, BC - Cuttings - 03/28.

89/0077 - *Callicarpa cathayana* - Heronswood Nursery - Kingston, WA - Seedling - 03/29.

89/0078 - *Gaultheria cuneata* - Heronswood Nurery - Kingston, WA - Seedling - 03/29.

89/0079 - *Gaultheria forrestii* - Heronswood Nursery - Kingston, WA - Seedling - 03/29.

89/0080 - *Gaultheria tetramera* - Heronswood Nursery - Kingston, WA - Seedling - 03/29

89/0081 - *Gaultheria veitchiana* - Heronswood Nursery - Kingston, WA - Seedling - 03/29.

89/0082 - *Ulmus* (Fastigate Cv.?) - U. WA Arboretum - Seattle, WA - Root Sprouts - 03/29.

89/0083 - *Betula* 'Whitespire' - Jung Seed and Nursery - Randolph, WI - 4' - 04/04.

89/0084 - *Syringa* 'MacFarlane Pink' - Jung Seed and Nursery - Randolph, WI - 2' - 04/04.

89/0085 - *Weigela* 'Red Prince' - Jung Seed and Nursery - Randolph, WI - 2' - 04/04.

89/0086 - *Weigela* 'Pink Princess' - Jung Seed and Nursery - Randolph, WI - 2' - 04/04.

89/0087 - *Betula uber* - VPI - Reynolds Homestead Agri. Expt. Station - 6" Liners - 04/04.

89/0088 - *Rhododendron occidentale* - Hendrichs Park - Eugene, OR - 8" Liner - 04/04.

89/0089 - *Halesia monticola* 'Rosea' - Arnold Arb/Case Estates (Via Dick Bir) - 4' B&B - 04/04.

89/0090 - *Cupressus glabra* 'Carolina Sapphire' - S. C. Forestry Commission - 8" Liners - 04/06.

89/0091 - *Cotula squalida* (#880037) - Longwood Gardens - Kennett Square, PA - Division - 04/08.

89/0092 - *Cotula squalida* (#880039) - Longwood Gardens - Kennett Square, PA - Division - 04/08.

89/0093 - *Cotula squalida* (#880040) - Longwood Gardens - Kennett Square, PA - Division - 04/08.

Boxwood Collection listed below - Orland E. White Arboretum - Boyce, VA - Unrooted Cuttings - 04/10.

89/0094 - *Buxus harlandii* - As above.

89/0095 - *Buxus himalayensis* - As above.

89/0096 - *Buxus microphylla* 'Helen Whiting' - As above.

89/0097 - *Buxus microphylla* 'Henry Hohman' - As above.

89/0098 - *Buxus microphylla* 'John Baldwin' - As above.

89/0099 - *Buxus microphylla* 'Miss Jones' - As above.

89/0100 - *Buxus microphylla* 'Sunnyside' - As above.

89/0101 - *Buxus microphylla* var. *japonica* - As above.

89/0102 - *Buxus microphylla* var. *japonica* 'Green Beauty' - As above.

89/0103 - *Buxus microphylla* var. *japonica* 'Morris Midget' - As above.

89/0104 - *Buxus sempervirens* 'Agram' - As above.

89/0105 - *Buxus sempervirens* 'Angustifolia' - As above.

89/0106 - *Buxus sempervirens* 'Argenteo-Variegata' - As above.

89/0107 - *Buxus sempervirens* 'Aristocrat' - As above.

89/0108 - *Buxus sempervirens* 'Belleville' - As above.

89/0109 - *Buxus sempervirens* 'Berlin' - As above.

89/0110 - *Buxus sempervirens* 'Bullata' - As above.

89/0111 - *Buxus sempervirens* 'Butterworth' - As above.

89/0112 - *Buxus sempervirens* 'Edgar Anderson' - As above.

89/0113 - *Buxus sempervirens* 'Elegantissima' - As above.

89/0114 - *Buxus sempervirens* 'Fastigata' - As above.

89/0115 - *Buxus sempervirens* 'Fortunei Rotundifolia' - As above.

89/0116 - *Buxus sempervirens* 'Glauca' - As above.

89/0117 - *Buxus sempervirens* 'Handsworthiensis' - As above.

89/0118 - *Buxus sempervirens* 'Handsworthii' - As above.

89/0119 - *Buxus sempervirens* 'Henry Shaw' - As above.

89/0120 - *Buxus sempervirens* 'Herman von Schrenk' - As above.

89/0121 - *Buxus sempervirens* 'Inglis' - As above.

89/0122 - *Buxus sempervirens* 'Latifolia Macrophylla' - As above.

89/0123 - *Buxus sempervirens* 'Latifolia Marginata' - As above.

89/0124 - *Buxus sempervirens* 'Maculata' - As above.

89/0125 - *Buxus sempervirens* 'Memorial' - As above.

89/0126 - *Buxus sempervirens* 'Myosotidifolia' - As above.

89/0127 - *Buxus sempervirens* 'Myrtifolia' - As above.

89/0128 - *Buxus sempervirens* 'Northern Find' - As above.

89/0129 - *Buxus sempervirens* 'Northland' - As above.

89/0130 - *Buxus sempervirens* 'Ponteyi' - As above.

89/0131 - *Buxus sempervirens* 'Prostrata' - As above.

89/0132 - *Buxus sempervirens* 'Rotundifolia' - As above.

89/0133 - *Buxus sempervirens* 'Salicifolia' - As above.

89/0134 - *Buxus sempervirens* 'Salicifolia Elata' - As above.

89/0135 - *Buxus sempervirens* 'Sport' - As above.

89/0136 - *Buxus sempervirens* 'Ste. Genevieve' - As above.

89/0137 - *Buxus sempervirens* 'Vadar Valley' - As above.

89/0138 - *Buxus sempervirens* 'Welleri' - As above.

89/0139 - *Buxus sempervirens* 'Woodland' - As above.

89/0140 - *Buxus sinica* var. *insularis* 'Justin Brouwers' - As above.

89/0141 - *Buxus sinica* var. *insularis* 'Pincushion' - As above.

89/0142 - *Buxus sinica* var. *insularis* 'Tall Boy' - As above.

89/0143 - *Buxus sinica* var. *insularis* 'Tide Hill' - As above.

89/0144 - *Buxus sinica* var. *insularis* 'Winter Beauty' - As above.

89/0145 - *Buxus* X 'Green Gem' - As above.

89/0146 - *Buxus* X 'Green Mound' - As above.

89/0147 - *Buxus* X 'Green Mountain' - As above.

89/0148 - *Buxus* X 'Green Velvet' - As above.

89/0149 - *Abeliophyllum distichum* 'Rosea' - Greer Gardens - Eugene, OR - 6" - 04/15.

89/0150 - *Betula turkestanica* - Greer Gardens - Eugene, OR - 1' - 04/15.

89/0151 - *Forsythia* X *intermedia* 'Nana' - Greer Gardens - Eugene, OR - 1' - 04/15.

89/0152 - *Prunus mume* 'Bonita' - Greer Gardens - Eugene, OR - 4' - 04/15.

89/0153 - *Prunus mume* 'Rosemary Clark' - Greer Gardens - Eugene, OR - 4' - 04/15.

89/0154 - *Prunus serrulata* 'Ukon' - Greer Gardens - Eugene, OR - 5' - 04/15.

89/0155 - *Hippeastrum* 'Apple Blossom' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20

89/0156 - *Hippeastrum* 'Barotse' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0157 - *Hippeastrum* 'Blushing Bride' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0158 - *Hippeastrum* 'Candy Floss' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0159 - *Hippeastrum* 'Carnival' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0160 - *Hippeastrum* 'Christmas Gift' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0161 - *Hippeastrum* 'Cocktail' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0162 - *Hippeastrum* 'Hercules' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0163 - *Hippeastrum* 'Inotake' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0164 - *Hippeastrum* 'Liberty' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0165 - *Hippeastrum* 'Ludwig's Dazzler' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0166 - *Hippeastrum* 'Masai' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0167 - *Hippeastrum* 'Milady' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0168 - *Hippeastrum* 'Red Lion' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0169 - *Hippeastrum* 'Rilona' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0170 - *Hippeastrum* 'Springtime' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0171 - *Hippeastrum* 'Sun Dance' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0172 - *Hippeastrum* 'Wedding Dance' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0173 - *Hippeastrum* 'Wonderland' - DeHertogh NCSU Research - Raleigh, NC - Bulbs - 04/20.

89/0174 - *Abelia floribunda* - Hillier Nursery - England - 1 Gal - 05/12

89/0175 - *Cornus alternifolia* 'Variegata' - Hillier Nursery - England - 2' - 05/12

89/0176 - *Cotinus* 'Grace' - Hillier Nursery - England - 2' - 05/12.

89/0177 - *Gleditsia triacanthos* 'Elegantissima' - Hillier Nursery - England - 2' - 05/12.

89/0178 - *X Halimocistus* 'Merrist Wood Cream' - Hillier Nursery - England - 1' - 05/12.

89/0179 - *Calluna vulgaris* 'Dainty Bess' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0180 - *Calluna vulgaris* 'Nana Compacta' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0181 - *Calluna vulgaris* 'Red Haze' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0182 - *Calluna vulgaris* 'Robert Chapman' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0183 - *Calluna vulgaris* 'Darleyensis' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0184 - *Calluna vulgaris* 'Cuprea' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0185 - *Calluna vulgaris* 'Torulosa' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0186 - *Calluna vulgaris* 'Autumn Glow' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0187 - *Calluna vulgaris* 'Joan Sparkes' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0188 - *Erica carnea* 'Startler' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0189 - *Erica carnea* 'Aurea' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0190 - *Erica carnea* 'Sherwoods Early Red' - Daystar Nursery - Litchfield, ME - Liner - 05/15.

89/0191 - *Erica X darleyensis* 'George Rendell' - Daystar Nursery - Litchfield, ME - 05/15.

89/0192 - *Erica X darleyensis* 'Furzey' - Daystar Nursery - Litchfield, ME - 05/15.

89/0193 - *Erica tetralix* 'Alba' - Daystar Nursery - Litchfield, ME - 05/15.

89/0194 - *Erica cineria* 'Atrosanguinea' - Daystar Nursery - Litchfield, ME - 05/15.

89/0195 - *Erica vagans* 'Lyonesse' - Daystar Nursery - Litchfield, ME - 05/15.

89/0196 - *Salvia greggii* 'White' - Lone Star Nursery - Austin, TX - Liner - 05/18.

89/0197 - *Salvia greggii* 'Pink' - Lone Star Nursery - Austin, TX - Liner - 05/18.

89/0198 - *Salvia greggii* 'Red' - Lone Star Nursery - Austin, TX - Liner - 05/18.

89/0199 - *Chrysoctinia mexicana* - Lone Star Nursery - Austin, TX - Liner - 05/18.

89/0200 - *Oenothera berlandieri* - Lone Star Nursery - Austin, TX - Liner - 05/18.

89/0201 - *Zexminia hispida* - Lone Star Nursery - Austin, TX - Liner - 05/18.

89/0202 - *Cercis canadensis* 'Wither's Pink Charm' - Vine & Branch Nursery - Durham, NC - Graft - 05/20.

89/0203 - *Cercis racemosa* - Vine & Branch Nursery (Nat. Arb. Scion) - Durham, NC - New Graft - 05/20.

89/0204 - *Nyssa sylvatica* (Dirr Selection) - Dr. Michael Dirr - Athens, GA - Scions/Grafts - 05/20.

89/0205 - *Paulownia tomentosa* 'Somaclonal Snowstorm' - Plant Sci./U. MA. - Amherst, MA - 2" - 05/22.

Assorted Index Seminum Seedlings As Follows:

89/0206 - *Abelia biflora* (#337) - Shanghai Bot. Garden - Seedlings Potted - 05/22.

89/0207 - *Acer elegantulum* (#3) - Shanghai Bot. Garden - Seedlings Potted - 05/22.

89/0208 - *Actinidia kolomikta* (#96) - Arboretum Mlynany - Czechslovakia - Seedlings Potted - 05/22.

89/0209 - *Amorpha nana* (#282) - Shanghai Bot. Garden - Seedlings Potted - 05/22.

89/0210 - *Amsonia hubrichtii* (#284) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0211 - *Aquilegia akitensis* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0212 - *Aristolochia elegans* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0213 - *Asclepias syriaca* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0214 - *Baptisia leucophaea* (#872) - ? - Seedlings Potted - 05/22.

89/0215 - *Callistemon citrina* v. *splendens* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0216 - *Callistemon lineraris* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0217 - *Chamaecytisus glaber* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0218 - *Clethra barbinervis* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0219 - *Cornus mas* (#77) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0220 - *Cornus officinale* (#348) - Hangzhou Bot. Garden - China - Seedlings Potted - 05/22.

89/0221 - *Cyclocarya paliuris* (#22) - Lushan Bot. Garden - China - Seedlings Potted - 05/22.

89/0222 - *Cytisus absinthoides* - ? - Seedlings Potted - 05/22.

89/0223 - *Cytisus austriacus* (#111) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0224 - *Cytisus grandiflorus* (#112) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0225 - *Cytisus hirsutus* - ? - Seedlings Potted - 05/22.

89/0226 - *Cytisus nigricans* (#113) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0227 - *Cytisus paczoski* (#114) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0228 - *Cytisus procumbens* (#115) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0229 - *Cytisus sessilifolius* - ? - Seedlings Potted - 05/22.

89/0230 - *Cytisus striatus* (#116) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0231 - *Daphne acutiloba* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0232 - *Decaisnea fargesii* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0233 - *Dipteronia sinensis* - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0234 - *Deutzia setchuensis* - ? - Seedlings Potted - 05/22.

89/0235 - *Echinops banaticus* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0236 - *Emmenopterys henryi* (NA60687) - U. S. Nat. Arb. - Washington, DC - Seedlings Potted - 05/22.

89/0237 - *Enkianthus perulatus* (#094) - U. Wash. Arb. - Seattle, WA - Seedlings Potted - 05/22.

89/0238 - *Ephedra americana* - ? - Seedlings Potted - 05/22.

89/0239 - *Eremerus himalaicus* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0240 - *Eucomis bicolor* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0241 - *Eucomis comosa* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0242 - *Euphorbia corollata* - Chicago Bot. Garden - Chicago, IL - Seedlings Potted - 05/22.

89/0243 - *Fraxinus mandshurica* - Holden Arboretum - Mentor, OH - Seedlings Potted - 05/22.

89/0244 - *Iris lactea* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seedlings Potted - 05/22.

89/0245 - *Itea chinensis* (#252) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0246 - *Lagerstroemia chekiangensis* (#461) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0247 - *Libertia formosa* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0248 - *Machilus grijiei* (#135) - Hangzhou Bot. Garden - China - Seedlings Potted - 05/22.

89/0249 - *Michelia skinneriana* (#118) - Hangzhou Bot. Garden - China - Seedlings Potted - 05/22.

89/0250 - *Myrica faya* - Martin Luther Univ. Bot. Garden - Halle, East Germany - Seedlings Potted - 05/22.

89/0251 - *Nyssa sinensis* (#214) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0252 - *Paliurus ramosissimus* (#522) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0253 - *Petalostemum foliosum* - Chicago Bot. Garden - Chicago, IL - Seedlings Potted - 05/22.

89/0254 - *Phoebe cheriagensis* (#138) - Hangzhou Bot. Garden - China - Seedlings Potted - 05/22.

89/0255 - *Phoebe shearerii* (#139) - Hangzhou Bot. Garden - China - Seedlings Potted - 05/22.

89/0256 - *Pieris polita* (#389) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0257 - *Quercus castanaefolia* - Australia contact - Seedlings Potted - 05/22.

89/0258 - *Quercus dentata* - Australia contact - Seedlings Potted - 05/22.

89/0259 - *Quercus macrocarpa* - ? (American source lost) - Seedlings Potted - 05/22.

89/0260 - *Quercus robur pedunculata* - Australia contact - Seedlings Potted - 05/22.

89/0261 - *Rhus punjabensis* - Sheffield Seed Co. - Locke, NY - Seedlings Potted - 05/22.

89/0262 - *Roscoea huneana* - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0263 - *Sanguisorba canadensis* - Chicago Bot. Garden - Chicago, IL - Seedlings Potted - 05/22.

89/0264 - *Schizofragma glaucescens* (NA60725) - U. S. Nat. Arb. - Washington, DC - Seedlings - 05/22.

89/0265 - *Sinocalycanthus chinensis* (#19) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0266 - *Taxus chinensis* - Nanjing Botanic Garden - China - Seedlings Potted - 05/22.

89/0267 - *Trema cannabaria* var. *diesiana* (#269) - Shanghai Bot. Garden - China - Seedlings - 05/22.

89/0268 - *Verbena hastata* - Chicago Bot. Garden - Chicago, IL - Seedlings Potted - 05/22.

89/0269 - *Xanthoceras sorbifolium* (#590) - Shanghai Bot. Garden - China - Seedlings Potted - 05/22.

89/0270 - *X Gaulnettya* 'Wisley Pearl' - Royal Hort. Soc./Wisley - England - Seedlings Potted - 05/22.

89/0271 - *Juniperus procumbens* 'Kiyomi' - Springvale Farm Nursery - Hamburg, IL - 3" pot - 05/25.

89/0272 - *Juniperus virginiana* 'Aurea' Springvale Farm Nursery - Hamburg, IL - 3" pot - 05/25.

89/0273 - *Spiraea X cinerea* 'Greifsh' - Springvale Farm Nursery - Hamburg, IL - 2" pot - 05/25.

89/0274 - *Chamaecyparis thyoides* 'Little Jamie' - Springvale Farm Nursery - Hamburg, IL - 2" pot - 05/25.

89/0275 - *Diospyros kaki* 'Tecumseh' - Dr. James Shanks (U.MD.) - College Park, MD - 2 gal/2' - 06/03.

89/0276 - *Cornus florida* 'Pink Princess' (PP6195) - Cedar Ridge Nursery - Augusta, NJ - 1' - 06/20.

89/0277 - *Juniperus flaccida* - Tom Dilatush - Robbinsville, NJ - 2' B&B - 06/23.

89/0278 - *Corylopsis X* 'Winterthur' - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0279 - *Hydrangea tiliifolia* - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0280 - *Ilex opaca* 'Maryland Dwarf' - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0281 - *Ilex serrata* 'Koshobai' - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0282 - *Laurus nobilis* 'Sunspot' - Brookside Gardens - Wheaton, MD - 6" Plant - 06/17.

89/0283 - *Lonicera nitida* 'Baggeston Gold' - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0284 - *Meliosma cuneata* - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0285 - *Schizophragma hydrangeoides* 'Moonglow' - Brookside Gardens - Wheaton, MD - 1 Gal - 06/17.

89/0286 - *Viburnum* 'Shoshoni' - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0287 - *Vitex* 'Silver Spire' - Brookside Gardens - Wheaton, MD - Cuttings - 06/17.

89/0288 - *Acer davidii* - U. S. Nat. Arb. - Washington, DC - Cuttings - 06/17.

89/0289 - *Carex morrowii* var. *tennolepis* - U. S. Nat. Arb. - Washington, DC - Division - 06/17.

89/0290 - *Schisandra sphenanthera* - U. S. Nat. Arb. - Washington, DC - Cuttings - 06/17.

89/0291 - *Hosta plantaginea* 'Flora Plena' - Botanicals, Inc. (Beijing Bot. Garden) - Wayland, MA - Division - 06/26.

89/0292 - *Arctostaphylos uva-ursi* 'Vancouver Jade' - UBC Bot. Garden - Vancouver, BC - Cuttings - 06/30.

89/0293 - *Choisya ternata* 'Sundance' - UBC Botanical Garden - Vancouver, BC - Cutting - 06/30.

89/0294 - *Rehderodendron macrocarpum* - UBC Botanical Garden - Vancouver, BC - Cuttings - 6/30.

89/0295 - *Sorbus reducta* - UBC Botanical Garden - Vancouver, BC - Seedlings - 6/30.

89/0296 - *Tetracentron sinense* - UBC Botanical Garden - Vancouver, BC - Seedling - 6/30.

89/0297 - *Vinca difformis* - UBC Botanical Garden - Vancouver, BC - Division - 6/30.

89/0298 - *Abeliophyllum distichum* 'Roseum' - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0299 - *Acer tschonoski* - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0300 - *Ampelopsis brevipedunculata* 'Elegans' - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0301 - *Ampelopsis humulusifolia* - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0302 - *Athrotaxis cupressoides* - Heronswood Nursery - Kinston, WA - Liner - 6/30.

89/0303 - *Baccharis magellanica* - Heronswood Nursery - Kingston, WA - 1 Gal. - 6/30.

89/0304 - *Berberis aggregata* - Heronswood Nursery - Kingston, WA - 1 Gal. - 6/30.

89/0305 - *Berberis jamesiana* - Heronswood Nursery - Kingston, WA - 1 Gal. - 6/30.

89/0306 - *Berberis parvifolia* - Heronswood Nursery - Kingston, WA - 1 Gal. - 6/30.

89/0307 - *Betula aporensis* (?) - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0308 - *Billadiera longiflora* - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0309 - *Callicarpa cathayana* - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0310 - *Carmichaelia australis* - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0311 - *Cercidiphyllum japonicum* 'Nana' - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0312 - *Cornus capitata* - Heronswood Nursery - Kingston, WA - Seedlings - 6/30.

89/0313 - *Crinodendron patagua* - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0314 - *Dacrydium laxiflorum* - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0315 - *Daphne alpina* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0316 - *Daphna giraldii* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0317 - *Daphne longilobata* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0318 - *Daphne pontica* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0319 - *Fabiana imbricata* 'Prostrata' - Heronswood Nursery - Kingston, WA - Cutting - 6/30.

89/0320 - *Holboellia coriacea* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0321 - *Hydrangea integrifolium* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0322 - *Hypericum henryi* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0323 - *Hypericum lancasterense* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0324 - *Hypericum pseudohenryi* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0325 - *Jasminum X stephanense* - Heronswood Nursery - Kinston, WA - Liner - 6/30.

89/0326 - *Kalopanax pictus* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0327 - *Ligustrum japonicum* 'Dwarf Form' - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0328 - *Olearia hastula* - Heronswood Nursery - Kinston, WA - Seedling - 6/30.

89/0329 - *Olearia* 'Masler Michael' - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0330 - *Phyllocladus alpinus* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0331 - *Pittosporum bicolor* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0332 - *Plantago asiatica* 'Variegata' - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0333 - *Pseudopanax colorsor* var. *ternata* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0334 - *Rhododendron occidentale* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0335 - *Rubus parvus* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0336 - *Saguetia thea* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0337 - *Schisandra chinensis* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0338 - *Staphlea colchica* - Heronswood Nursery - Kingston, WA - Seedling - 6/30.

89/0339 - *Thujopsis dolobrata* 'Nana' - Heronswood Nursery - Kingston, WA - Liner - 6/30.

89/0340 - *Viburnum atrocyaneum* - Heronswood Nursery - Kingston, WA - Liner - 6/30.