

73 Maliebaan
3581CG Utrecht, NL
February 24, 1992

Dr. Donna Ware
Department of Biology
College of William and Mary
Williamsburg, Virginia 23185

Dear Donna:

Goede middag! Actually we are doing a little better with our Dutch than that! Marilyn and I are enjoying our stay in the Netherlands. The people are exceedingly helpful and kind -- most, unfortunately for our Dutch, speak English well. Although housing, clothing and some foods are a bit steep, the transportation facilities are superb. One can go almost anywhere in the Netherlands quickly and conveniently by train or bus -- and are they prompt! We have made friends with a number of people from here and other countries and have had the opportunity to travel to southern England, France, Belgium and western Germany. In addition, our sons were able to be here for Christmas and we all celebrated with Jeannine and her fiance, Luis (a Portuguese fellow) in Brussels. They are planning to get married on April 10.

As you know, I am continuing the study on the stratigraphy and development of the sinkholes on the Peninsula. Palynologists at the University here have broken down some of the samples that I gave them, and fortunately they contain pollen. During our discussion they asked what trees and other plants were present in the area and I listed as many as I could, but finally concluded that I should write you, enlisting your aid. Could you possibly provide me with a list of plant species found in the area centered around the intersection of U.S. 17 and Fort Eustis Blvd. in York County and extending five miles in any direction. As I remember, a student of yours was carrying out a plant distribution study. I am sorry to bother you with this request, but would really appreciate your help and will, of course, acknowledge your contribution in the paper.

Hope your year is going well and we look forward to seeing you when we return to the U.S. in May.

Sincerely,


REF# 2211010

24 March 1992

Dr. Gerald Johnson
73 Maliebaan
3581CG Utrecht
Netherlands

Dear Jerre:

How good to hear from you! You are clearly having a fine sabbatical experience. It is really smart to take a whole year. When we took ours (to Arkansas!), we were away just during the summer and fall semester. Oh, how we wished that we could have stayed one more semester. It is great that Jeannine is within visiting distance, and that there is a wedding to celebrate this spring. Will they be married in Brussels?

Here's to your on-going study of the sinkholes on the Peninsula! Fortunately, six of the areas I studied on the contract with the Virginia Natural Heritage Program were within a five mile radius of the intersection of U. S. Rt. 17 and Fort Eustis Blvd. I am happy to provide the following list of those species mentioned in my field notes from those sites. I went through the notes and pulled out the species names as I encountered them, then I organized them only by life form; beyond that I just tried to group all the members of a given family together and listed the common name if I could think of it.

It would be wonderful if those pollen samples could be identified. I'm wondering how far back they date??

Please give my warm greetings to Marilyn. It will be good to see you when you return to "these parts"!!

With best regards,

Donna

P. S. Let me know what questions arise in response to this information, and perhaps I can "fine tune" it better to your needs.

We have a Master's Thesis on file that treats the vascular flora of Ft. Eustis (by Phyllis Appler). It lists about 540 species.

VASCULAR PLANTS NOTED WITHIN 5 MI RADIUS US RT. 17 & VA 105

Trees

Pinus taeda, loblolly pine, Pinaceae
P. virginiana, Virginia pine,
Quercus michauxii, swamp chestnut oak, Fagaceae
Q. palustris, pin oak
Q. pagoda, cherrybark oak
Q. phellos, willow oak
Q. nigra, water oak
Q. alba, white oak
Q. coccinea, scarlet oak
Q. lyrata, overcup oak
Q. laurifolia, laurel oak
Q. muhlenbergii, chinquapin oak
Q. falcata, southern red oak
Q. velutina, black oak
C. pallida, sand hickory
C. glabra, pignut hickory
C. ovalis, red hickory
C. tomentosa, mockernut
Fagus grandifolia, American beech
Liriodendron tulipifera, tulip poplar, Magnoliaceae
Ulmus americana, American elm, Ulmaceae
Fraxinus sp., ash, Oleaceae
F. pensylvanica, green ash, Oleaceae
Acer rubrum, red maple, Aceraceae
Platanus occidentalis, Sycamore, Platanaceae
Oxydendrum arboreum, sourwood, Ericaceae
Ilex opaca, American holly, Aquifoliaceae
Carpinus caroliniana, American hornbeam, Betulaceae
Cornus florida, flowering dogwood, Cornaceae
Asimina triloba, pawpaw, Annonaceae
Liquidambar styraciflua, sweet gum, Hamamelidaceae
Nyssa sylvatica, black gum, Nyssaceae
Persea palustris, red bay, Lauraceae
Magnolia grandiflora, southern magnolia, Magnoliaceae

Shrubs

Corylus americana, hazelnut, Betulaceae
Alnus serrulata, tag alder, Betulaceae
Myrica cerifera, wax myrtle, Myricaceae
Decodon verticillata, water loosestrife, Lythraceae
Viburnum nudum, Caprifoliaceae
V. dentatum, arrow-wood
Cephalanthus occidentalis, Rubiaceae
Symplocos tinctoria, sweetleaf, Symplocaceae
Clethra alnifolia, sweet pepperbush, Clethraceae

Shrubs, cont.

Rhododendron, probably *R. viscosum*, swamp azalea, Ericaceae
 Leucothoe racemosa, fetterbush, Ericaceae
 Vaccinium sp., highbush blueberry, Ericaceae
V. fuscatum, black huckleberry
 Gaylussacia frondosa, dangleberry, Ericaceae
 Crataegus sp., hawthorn, Rosaceae

Vines and small woody plants

Berchemia scandens, supplejack, Rhamnaceae
 Trachelospermum difforme, Apocynaceae
 Smilax hispida, hispid green-briar, Liliaceae
S. rotundifolia, green-briar
S. walteri, red-berried green-briar
 Lonicera japonica, Japanese honeysuckle, Caprifoliaceae
 Dioscorea villosa, wild yam, Dioscoridaceae
 Campsis radicans, trumpet creeper, Bignoniaceae
 Mitchella repens, partridge berry, Rubiaceae
 Vitis rotundifolia, muscadine, Vitaceae
 Parthenocissus quinquefolia, Virginia creeper, Vitaceae

Ferns

Pteridium aquilinum, bracken, Pteridaceae
 Polypodium polypodioides, resurrection fern, Polypodiaceae
 Loricaria areolata, netted chain fern, Blechnaceae
 Anacharis virginica, Virginia chain fern, Blechnaceae
 Osmunda cinnamomea, cinnamon fern, Osmundaceae
 Azolla caroliniana, water fern, Azollaceae
 Onoclea sensibilis, sensitive fern, Aspidiaceae
 Thelypteris thelypteroides, marsh fern, Aspidiaceae
T. hexagonoptera, broad beech fern
T. noveboracensis, New York fern,
 Dryopteris celsa, log fern, Aspidiaceae

Herbaceous flowering plants

Arisaema triphyllum, Jack-in-the-pulpit, Araceae
 Lemna spp., duckweeds, Lemnaceae
 Leersia virginica, Poaceae
L. oryzoides, Rice cut-grass
 Uniola laxa, Poaceae
 Agrostis sp., Poaceae
 Microstegium vimineum, Poaceae
 Cinna arundinacea, Poaceae
 Calamagrostis cinnoides, Poaceae

Dichanthelium dichotomum, Poaceae
 D. clandestinum, Poaceae
 Panicum verrucosum, Poaceae
 Erianthus giganteus, Indian grass, Poaceae
 E. contortus
 Sorghastrum elliottii, Poaceae
 Carex spp., Cyperaceae
 C. joori
 C. glaucescens
 Dulichium arundinaceum, Cyperaceae
 Eleocharis tuberculosa, tuberculate spikerush, Cyperaceae
 E. engelmannii, Engelmann's spikerush
 E. obtusa
 Fimbristylis perpusilla, Cyperaceae
 F. annua
 Rhynchospora capitellata, Cyperaceae
 R. inexpansa
 R. corniculata, beak-rush
 Medeola virginiana, Indian cucumber-root, Liliaceae
 Uvularia sessiliflora, bellwort, Liliaceae
 Goodyera pubescens, rattlesnake plantain, Orchidaceae
 Malaxis spicata, little orange addersmouth, Orchidaceae
 Tipularia discolor, cranefly-orchis, Orchidaceae
 Platanthera cristata, Orchidaceae
 Juncus effusus, rush, Juncaceae
 J. repens
 Polygonum punctatum, smartweed, Polygonaceae
 P. densiflorum
 P. hydropiperoides
 P. sagittatum, tear-thumb
 Cuscuta pentagona, dodder, Convolvulaceae
 Typha latifolia, cattail, Typhaceae
 Crotalaria purshii, rattlebox, Fabaceae
 Desmodium ciliare, Fabaceae
 D. laevigatum, smooth beggar's lice
 Lespedeza capitatus, Fabaceae
 L. angustifolius
 L. virginica
 Rubus spp., blackberry, Rosaceae
 R. cuneifolius
 Hypericum virginicum, St. John'swort, Hypericaceae
 H. stans, St. Andrew's cross
 Impatiens capensis, jewelweed, Balsaminaceae
 Ludwigia alternifolia, rattlebox, Onagraceae
 L. sphaerocarpa
 Oxypolis rigidior, Apiaceae
 Proserpinaca palustris, mermaid weed, Haloragaceae
 Myriophyllum pinnatum, Haloragaceae
 Polygala lutea, Polygalaceae
 Utricularia radiata, bladderwort, Lentibulariaceae
 U. gibba

Scutellaria lateriflora, skullcap, Lamiaceae
Penthorum sedoides, ditch stonecrop, Crassulaceae
Gentiana saponaria, soapwort gentian, Gentianaceae
G. catesbaei, Catesby's gentian
Chelone cuthbertii, turtlehead, Scrophulariaceae
Agalinus purpurea, purple gerardia, Scrophulariaceae
Aureolaria virginica, false foxglove, Scrophulariaceae
Gratiola virginiana, Scrophulariaceae
Lindernia dubia, Scrophulariaceae
C. glabra
Aster simplex, Asteraceae
Boltonia caroliniana, Asteraceae
Senecio aureus, golden ragwort, Asteraceae
Solidago microcephala, goldenrod, Asteraceae
S. rugosa, rough-leaved goldenrod
S. altissima, tall goldenrod
S. odora, sweet goldenrod
S. juncea, goldenrod
S. fistulosa, goldenrod
Eupatorium capillifolium, cypressweed, Asteraceae
E. perfoliatum, perfoliate boneset
E. semiserratum
Eupatoriadelphus dubius, Asteraceae
Sericocarpus solidaginoides, Asteraceae
Helianthus angustifolius, narrow-leaved sunflower, Asteraceae
Liatris graminifolia, blazing star, Asteraceae