

New Educational Resources at National Colonial Farm

By Donald W. Strasburg

The Accokeek Foundation's National Colonial Farm (NCF) is part of the Piscataway NP, located on the Maryland banks of the Potomac River opposite Mount Vernon. A living historical farm, NCF depicts life on a one-family tobacco plantation in 1750. About half of the NCF visitors are school groups, many from the inner cities of metropolitan Washington, D.C. and Baltimore. Surprisingly few of these young people have had any prior exposure to rural life or to the natural history that abounds in farm gardens, fields and forests. Thus, besides learning about their colonial heritage, many young visitors acquire knowledge of things the rest of us take for granted. A typical question put to a docent might be "Is that where milk comes from?", meaning a cow!

Recognizing an opportunity to broaden its educational function, NCF has recently added to its offerings three new educational resources: an herbarium, a reference collection of insects, and an arboretum. Because of their fragility or technical nature, not everything in these collections can be shown to all visitors, but plans are underway to increase visitor exposure via the docents who conduct the tours and by means of special displays. Although the plants and insects are contemporary, most were also present in 1750, and their beneficial or harmful effects were as pertinent to the 18th Century tobacco farmer as they are today.

The herbarium is the result of a botanical survey of NCF's vascular plants completed by Dr. Steven R. Hill (now of Clemson University) in 1984. The survey included all clubmosses, ferns, conifers and flowering plants, but excluded algae, fungi, lichens and mosses. A pressed specimen of each species found in the survey has been mounted on the highest quality herbarium paper, labeled, placed in a protective folder, and stored systematically in a fumigated cabinet. Within each of the four major plant categories, the plant families, genera, species and varieties are arranged alphabetically. Each herbarium sheet bears a reference number that ties it to an index kept in the herbarium cabinet. Index entries consist of the full scientific name, author citation, common name or names, and text, telling whether the plant is a native or introduced and from where, flowering time, frequency of occurrence at NCF, locations at NCF, Dr. Hill's collection or reference number and comments such as general occurrence in Maryland, edible or poisonous properties, and whether the species should be carefully preserved.

At the back of the index are a summary, alphabetical index, maps and suggested references. The collection contains 441 species, 304 genera and 100 plant families. Of this number, 328 are native species and 113 introduced, mostly from Europe.

The herbarium was assembled in the best botanical manner, and contains specimens and data of interest to a professional botanist. After making prior arrangements with NCF, such visitors can have free access to the herbarium.

The NCF insect collection was begun in 1985 by Donald W. Strasburg, a volunteer entomologist at NCF, and is expected to be completed in 1988. Because of the vast numbers of insect species, completeness was never an aim; instead the collection contains most of the larger species likely to be en-

countered, a representative sampling of the smaller species, and some numbers of those species that are beneficial or deleterious agriculturally.

The collection consists of twelve 14" x 21" Riker Mounts (here the insects are bedded on resilient synthetic fiber, without pins) and eighteen 14" x 21" display cases where they are simply mounted on pins. The sealed Riker Mounts are relatively shockproof, and hence can be passed around or displayed where some handling is permitted. They contain the larger butterflies and moths exclusively. These showy insects invariably attract attention and young people deserve the opportunity to examine them closely.

The smaller butterflies and moths and all other insects are pinned in display cases, shown on tabletops, where visitors merely view them and read the textual material. All specimens are labeled with full Latin name, common name, citation and a description of life history and habits. This is done on a species basis for the large forms and by family or order for the small species belonging to the lesser orders. With the Hymenoptera (bees, wasps, and ants) and Diptera (flies and mosquitos) as yet undone, the collection presently contains representatives of 20 orders, 94 families, 296 genera and 391 species, subspecies and forms. Where the sexes are different, both are shown, and in some cases the underside as well. Additional display cases and Riker Mounts probably will be added to house freeze-dried larvae and soft-bodied non-insects such as spiders, chrysalids, cocoons, egg masses, and examples of insect destruction of crops, wood, fabrics.

The arboretum was conceived in 1986 by Frederick Tiip as an educational heritage. Saplings of trees native to the NCF area have been purchased each year, with the goal of completing the planting in 1988. The arboretum is located in what had been a gently sloping hillside meadow, adjacent to a native oak-hickory forest. Visitors can stroll through the plantings in natural surroundings, and by facing west have a commanding and beautiful view of NCF, the Potomac River and Mt. Vernon. The arboretum eventually will contain 128 species, 59 genera and 29 families. Labels give the full scientific and common names, and a handout map locates each species. Grass and invasive seedlings are mowed to reduce competition and permit easy access. As the trees reach the flowering and fruiting stages their interest value will increase because of the accompanying influx of bird and insect visitors. NCF visitors are encouraged to visit the arboretum as well as the colonial area of the farm.

For those with an interest in a contemporary forest, an eastern hardwoods nature trail lies adjacent to the arboretum. Many of the arboretum species can be seen there again, with their associated vines, shrubs, weeds, birds, insects and forest-floor communities.

Even though in differing stages of development, these three facilities have drawn local attention. As awareness of their existence spreads, and as the arboretum grows, we anticipate wider use by the public, natural history study groups and researchers. Facilities such as these constitute an important adjunct to any NPS management area, both as natural history baselines and as educational tools.

Dr. Strasburg is a Fellow of the Accokeek Foundation's Research Program.