

GARDENS

Following the Garden Trail of Lewis and Clark

By IRENE STERNBERG
Special to The Washington Post

PHILADELPHIA

The Super Bowl isn't the only source of excitement in Philly at the moment. The town is also gripped by another event defined by fame, nerve, animal skins and far too many interruptions. We refer to the Lewis and Clark Expedition. Many of the city's cultural institutions are marking the 200th anniversary of the 28-month mission undertaken by William Clark and Meriwether Lewis between 1804 and 1806, including the Academy of Natural Science's show of rare artifacts from the journey.

The exhibits have special appeal to gardeners and herbalists. They celebrate the discovery of beautiful native plants we have grown to love and need, including the Oregon grape holly and the coneflower or echinacea. When Thomas Jefferson, who conceived the endeavor, was inaugurated in 1801, the nation had 5,308,483 inhabitants. Two-thirds of the populace lived within 50 miles of the Atlantic, so planning, training, and equipping took place in the East, primarily in Philadelphia. The team's assignment was to find the Northwest Passage to the Pacific, a waterway that ultimately proved nonexistent. They also set out to learn everything possible about tribes, flora, fauna, weather and geography of the West, a region then largely defined in the imagination.

Lewis collected, preserved and catalogued plant and animal life previously unknown to science—although long familiar to Native Americans. Some proved to be medical miracles. Others helped build the country. Some we appreciate for their wild beauty and many grow in our gardens today.

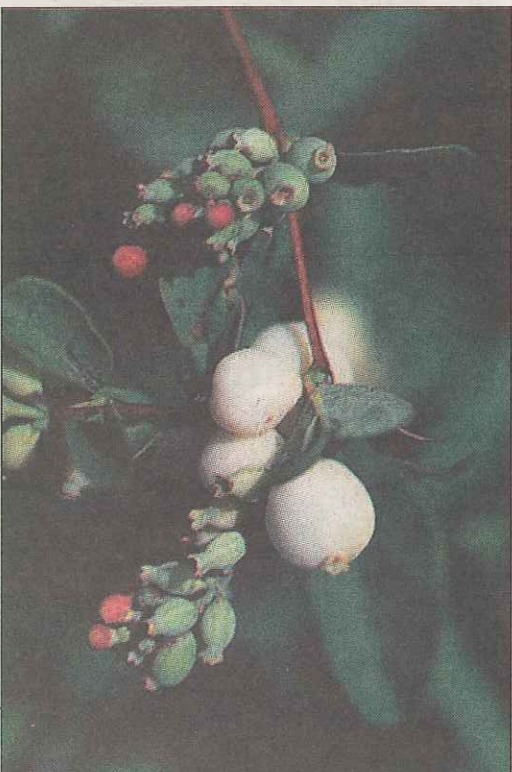
The first plant sent back was the Osage orange, a shade tree that has fallen from favor. It sprouted, most

likely, from seeds or cuttings Lewis sent to Bernard McMahon, an active horticulturist and nurseryman. Oregon grape holly, *Mahonia aquifolium*, a popular shade plant also grown from Lewis's seeds, was named in honor of McMahon.

Lewis first saw Osage orange trees in St. Louis before the Corps of Discovery started its voyage up the Missouri. Intrigued by the thorny branches and the large, bumpy, sweet-smelling fruit, Lewis sent cuttings back to Jefferson along with those from other fruit trees, some minerals of interest and a horned toad. Tough to assess the functionality of the toad, but the Osage orange fast became the most planted tree in America for dividing property, containing livestock and creating windbreaks. It was so valued that seed sold for \$5 a pound.

Settlers planted 60,000 miles of Osage orange hedges in 1868 alone, according to U.S. Department of Agriculture estimates. By 1880 they were rarely planted anymore. Demand declined with the advent of barbed wire, but surviving Osage oranges still line country roads. The fruit is considered a roach repellent, and today fruit, bark, seed, roots and wood are being tested as antibiotics and food preservatives.

Another find was the narrow-leaved coneflower (*Echinacea angustifolia*), used for treating snakebites and sore throats, and nowadays a trendy garden favorite and top-selling herbal product, despite recently being discredited as a cold remedy. The bark of the Pacific yew (*Taxus brevifolia*), yet another discovery, is the source



Snowberry, a Lewis and Clark find for gardeners.

BY J.L. REVEAL/ACADEMY OF NATURAL SCIENCES

of taxol, now used to treat cancer. Western blue flax (*Linum lewisii*) was made into linen and linseed oil, but is currently being studied for its potential to lower cholesterol and benefit those with diabetes, arthritis and cancer.

Other discoveries were: snowberry (*Symphoricarpos albus*), a widely used garden shrub; angelica, a popular herb; bearberry (*Arctostaphylos uva-ursi*), the groundcover; the spring bulb camassia, the roots of which were an Indian diet staple that helped keep the corps from winter starvation; and two new genera, aptly named Lewisia (a perennial now used as a rock garden plant)

See EXPLORERS, Page 8

A COOK'S GARDEN

Houseplants With Zest

By BARBARA DAMROSCH
Special to The Washington Post

My green-thumbed parents produced many wonders, but none astounded me more than their Ponderosa lemons. It wasn't just the fact of a tropical fruit growing on a New York City windowsill, it was that one the size of a grapefruit could dangle from a two-foot plant. Each mighty lemon took many months to come into being, but when it did, it yielded enough juice for one of my mother's fabulous lemon meringue pies. Sometimes two.

On my own, I've kept up the citrus habit, branching off into Meyer lemons, Valencia oranges and calamondins, with varying success. In general, it's harder to get the sweeter fruits like oranges to bear than acidic ones like lemons. The tart little calamondins are the easiest. Though too astringent to eat out of hand, I like the assertive flavor they bring to cooking. I remove the seeds, simmer them with honey, and chop them up to create a glaze for poultry or for a cake. They can substitute for orange rind in *Spicy Mandarin Beef*.

Frankly, I would keep my windowsill citrus grove for the flowers alone. The sweet scent of those white blossoms ranks with that of jasmine, or gardenia—two plants that bloom far less readily for the indoor gardener. Just one flower cluster gets your attention the minute you walk into the room.

Citrus have a reputation for being temperamental to grow as houseplants. They are, but they're also nearly indestructible. The most important thing to know is that they hate change. Sudden increases or decreases in temperature, light and humidity cause them to throw what I call a leaf tantrum. A few leaves fall, then some more, and within days they litter the floor, often leaving the plant denuded. When this happens I feel self-reproach, but not despair, because I know that with attentive care the plant will refoliate and even take a new lease on life, blooming profusely.

Seeds from citrus you buy won't grow true to the original, so it's better to buy a grafted plant from a nursery. Using a light, peat-based potting mix, plant it in a smallish pot, gradually moving it up to bigger pot



PHOTODISC

Kumquats.

the weather is consistently over 60 degrees, to spare them a shock. I place them in full shade at first, then after a week or so move them into the dappled shade under a tree, and gradually into bright sun. In fall, I repeat the process in reverse and bring them inside while it is still quite warm.

While perfuming my outdoor terrace, the plants have been avidly pollinated by bees and have set tiny green fruit. (Indoors, I pollinate the blossoms by playing bee with a Q-tip, transporting pollen from the stamens of one flower to the pistil of another.) Apart from the calamondins, most of the fruits will fall before they mature. It is normal for extra citrus fruits to drop