## Callaway Gardens Has the Butterfiles

Amid lush Cape honeysuckle and shiny jasmine, a passionflower butterfly lands on a patch of flowering lantana and searches for nectar with its proboscis. Although the insect collects the nectar with its tongue, it can taste with almost every part of its body—including its feet.

This is only one of about 115 exotic and native North American butterfly species visitors can enjoy and learn about at the Day Butterfly Center. which opened in September at Calloway Gardens, in Pine Mountain, Georgia. The center's 7,000-square-foot octagonal conservatory is the largest glassenclosed butterfly exhibit in North America. It houses nearly 1,000 tropical butterflies of about 50 species from Central and South America, Malaysia, and Taiwan. Besides the passionflower butterfly, the exotic species include the giant Chinese kite butterfly, the dead leaf butterfly, the Paris peacock swallowtail, and the owl butterfly. In addition, hummingbirds flit and pheasants stroll about the tropical setting, which features a 12-foot waterfall cascading into a pool.

Outside, a native wildlife garden attracts resident birds and some 65 native butterfly species. Walking through one and a half acres of rhododendron, Carolina laurel cherry, and pyracantha, visitors can see tiger swallowtails (the state butterfly of Georgia), red-banded hairstreaks, sleepy oranges, cloudless giant sulphurs, and more.

The center has produced an orientation film that reveals the complex life cycle of the butterfly, and has designed demonstration gardens and seminars that teach visitors how to attract butterflies. As the world's human population expands and develops land, butterflies and other wildlife are finding fewer and fewer places to inhabit. The center's sample gardens show how people and nature can benefit one another.

## Breeding Northern White Rhinos

One of the rarest and most endangered animals in the world is the northern subspecies of the white, or square-lipped, rhinoceros. In 1980 there were about 820 in Sudan, Zaire, and Central African Republic, with a lone animal in Uganda. Now only a single population of 17 survives in the wild—in Garamba National Park, Zaire. Another 12 are in captivity, 10 in the Dvur Kralove Zoo, in Czechoslovakia, and one male each in the London and Khartoum zoos.

Zoologists at Dvur Kralove have been trying to breed their northern whites, but reproduction rates have been poor. In an attempt to increase breeding success, they are sending three of their animals—a male and two females—to the San Diego Wild Animal Park, which has had great success breeding the southern white subspecies. Through negotiations with the IUCN Captive Breeding Specialist Group, the Khartoum Zoological Gardens has also agreed to send its male to San Diego.

Although not noticeably different in appearance or behavior, the northern and southern subspecies—separated geographically by hundreds of miles—differ in DNA composition. They apparently diverged from a common ancestor about two million years ago. During the 1800s, the southern white was hunted to near extinction; strict conservation laws have brought its numbers up to 3,500 in the wild and 500 in captivity. Let's hope captive-breeding efforts for the northern white rhino will be equally successful.

## Sumatran Rhino Trust

The Sumatran rhino is faring better than the northern white, but only 500 to 700 of this species are left in the wild. Sumatran rhinos originally ranged from northeastern India and southeastern Bangladesh to the Malay Peninsula and on Sumatra and Borneo.

Of the remaining animals, the majority are in Sumatra, where many are too isolated by habitat destruction to breed.

The Sumatran Rhino Trust is one of 46 species survival plans designed by the AAZPA (American Association of Zoological Parks and Aquariums) to help save critically endangered species. In cooperation with the Indonesian government and overseen by the IUCN Asian Rhino and Captive Breeding specialist groups, the SRT has set up a capture operation in Sumatra and breeding projects in several zoos. The captive-bred population will serve as a hedge against extinction of the rhino and as a reservoir for release to protected areas in the wild.

To date, SRT has trapped three rhinos—all females. One is destined for Surabaya Zoo, on Java, where it will be paired with the single resident male. The other two are slated for the United States—one to Cincinnati and one to San Diego. The next female trapped will go to the Bronx Zoo; males will go to Cincinnati, San Diego, Surabaya, and Bronx, in that order.

In addition to the rhinos captured by SRT, there is a pair at the Jakarta Zoo and a single male in Sabah, both locations in Indonesia. In Malaysia, there are five females and one male in the Malacca Zoo and two females in a holding facility in Sungai Dusun. In a separate breeding effort, Britain's Howletts Zoo Park has a pair.

## Why the Turkey Has a Wishbone

After the holiday bird has been consumed, tradition has it that two people pull on opposite ends of the wishbone while each makes a wish. When the bone breaks, the person who gets the larger piece will see his or her wish come true. That certainly isn't what the wishbone is meant for, and scientists have long wondered just what purpose the structure has for birds.

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