LIVINGSTON RIPLEY WATERFOWL SANCTUARY

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Fall 2001

The Sanctuary's mission is to promote the conservation of rare and endangered waterfowl and their habitats through propagation, education and research.

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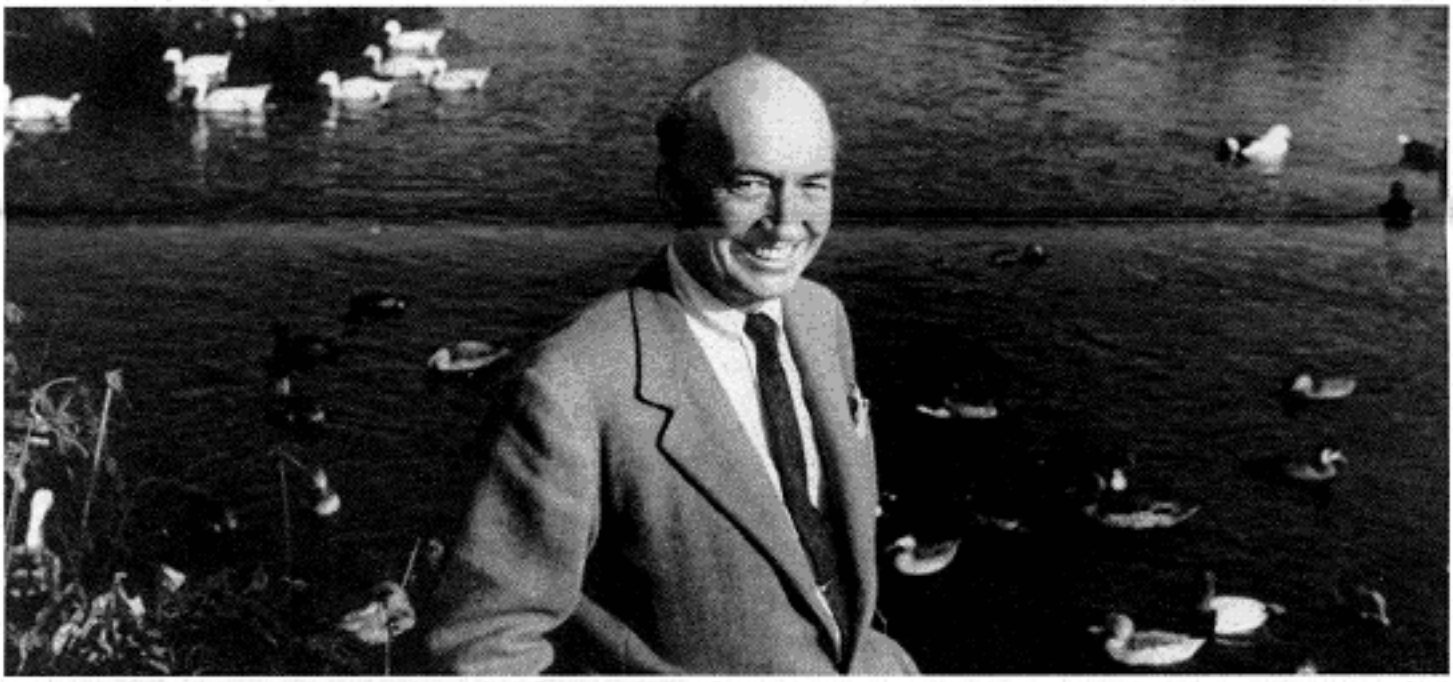


This issue of the newsletter is dedicated to the memory of S. Dillon Ripley (1913 - 2001), founder, with his wife Mary Livingston Ripley, of the Livingston Ripley Waterfowl Sanctuary. The Sanctuary is the outgrowth of Dillon Ripley's lifelong fascination with ducks, having built his first duck pond at age 13.

S. DILLON RIPLEY, ORNITHOLOGIST AND CONSERVATIONIST

By Dr. Thomas Lovejoy

However awesome Dillon Ripley's achievements as the greatest twentieth century Secretary of the Smithsonian Institution, his prodigious command of the English language, or his vast influence, they were counterbalanced by his infectious smile and sense of fun. Those in turn were closely linked to a sense of the land and the wonders of nature which derived from his early years in Litchfield - a place which played a prominent role for his entire life.

Birds in particular fascinated him, and he built his first pond for waterfowl while still a boy. He dutifully considered a career in law or finance, but his deep-seated passion asserted itself. He earned a Ph.D. at Harvard and never looked back.

Paired with the intellectual passion was an equally forceful concern for what was happening to many bird species; so conservation became an equally dominant theme. For many years, he was President of the International Council for Bird Preservation (succeeding his close friend, the great aviculturist and ornithologist, Jean Delacour). I vividly remember Dillon's remark, when I was an undergraduate, that every biologist with a conscience should spend some time on conservation.

While on the faculty at Yale, he went on multiple expeditions, published prolifically as a scientist, wrote popular books, attracted a handsome gift and ornithological library from William Robertson Coe, and provided brilliant leadership for the Peabody Museum of Natural History. During his two decades as Secretary of the Smithsonian, he continued to be active both in ornithology and conservation (including as chairman of World Wildlife Fund - US).

Dillon Ripley was also a compelling pragmatist. He sent many a persuasive letter to Congress on conservation matters, appealing to our representatives in ways they could understand. One example of this was when he actively worked to stop a sea-level canal in Panama. This he achieved by explaining to the Congress - complete with a specimen - how such a canal would let sea-snakes (essentially marine cobras) into the Caribbean and ruin Florida real estate! Somehow, despite all his other projects, he found the time to produce a magnificent monograph on rails.

One can see these themes today at the Livingston Ripley Wildfowl Sanctuary named for him and his wife and close partner, Mary Livingston Ripley: the living bird collection and aviculture and the twin themes of natural science and stewardship of the natural world. He simply loved to visit the duck ponds, muck them out when needed, and indeed just listen to the sounds of the birds. From their terrace, he and Mary would listen to the avian symphony of their peaceable little kingdom and think of ways to make the larger world more peaceable and enjoyable for both birds and people.

New Executive Director at LRWS

Welcome to the Livingston Ripley Waterfowl Sanctuary's annual newsletter! As the new Executive Director at LRWS, I am very happy to take this opportunity to introduce myself to the Sanctuary's friends and supporters. It is an honor to become part of this very special organization, and it is with great pleasure that I begin my new role to help develop the Sanctuary's programs in conservation, education and science.

LRWS Executive Director, Suzanne ("Sukie") Zeeve, Ph.D., with pre-release black-and-white ruffed lemurs at Duke University Primate Center

I have been very fortunate to work in the wildlife conservation field in settings from world-renowned zoos to remote rainforest research stations, with the aim of preserving and understanding endangered wildlife and habitats. While my own research has been primarily with primates and carnivores, I have coordinated conservation projects for many endangered wildlife species, from mammals, reptiles and amphibians to fishes, invertebrates and, yes, birds! I am learning more about these winged wonders every day here at the Sanctuary.

My appreciation of biodiversity has evolved from my "animal-crazy" childhood (never really outgrown) and post-college years as a zookeeper at the Bronx Zoo, through doctoral studies in animal behavior, to research on primates in the lowland rainforest of Congo (formerly Zaire). Despite its vastness, this primeval habitat is falling to large-scale logging and mining operations, as well as to civil strife, which degrade ancient forests, open roads to poachers, and increase the bushmeat trade. After grad school, as Biodiversity Technical Advisor to SUNY at Stony Brook's Institute for Conservation of Tropical Environments, I managed conservation and development projects in Madagascar's rapidly-vanishing, mountainous bamboo rainforest, where fabulously bizarre species found nowhere else are critically endangered. Some are disappearing before they are even described by science, their habitat fragmented by slash-and-burn agriculture and other pressures from the island's poor and fast-growing human population. Working in such magnificent wild places that are so beset by human-induced change has greatly influenced my perspective as a scientist. To echo S. Dillon Ripley's advice to his students, as recalled above by Dr. Lovejoy, research and conservation must go hand in hand, or there will soon be little left to study.

For many years, I have been active in the American Zoo and Aquarium Association (AZA), and particularly relish the challenge of integrating conservation breeding programs with field conservation efforts. This was the focus of my work as the U.S.-based Project Coordinator for the Madagascar Fauna Group, an international consortium of zoos, aquariums and universities. Projects by members ranged from censusing Madagascar Pond Herons, breeding programs in tandem with field research for species such as leaf-tailed geckos, Meller's ducks, tomato frogs, ploughshare tortoises, various lemurs and freshwater fishes, to educating Malagasy schoolteachers, training conservation personnel (some with support from the Smithsonian) and improving the country's two zoos. A major project that some of you may have heard about was the release of captive-bred ruffed lemurs to an isolated forest block to reinforce its unsustainably small wild population. This combined elements of captive breeding programs, field research, reintroduction techniques, habitat protection, and training and education for local people.

As a conservation consultant here in North America, I have conducted research at Point Defiance Zoo & Aquarium in Tacoma, Washington on marsupial carnivores on loan from the Smithsonian's Center for Research and Conservation. I have also developed marine life education projects in Alaska, advised on conservation and science, and lectured on conservation issues. It has been a tremendous education for me to work with so many wonderful colleagues in the zoological world, and a privilege to share this with others.

Over the next year at the Sanctuary, we hope to explore AZA membership, collection planning and expanded involvement with cooperative breeding programs with other institutions here and abroad. Along with projects for improving the infrastructure and initiating programs in education and research, these activities will help to realize the Sanctuary's mission and enhance its extraordinary collection.

I also look forward to exploring the magnificent countryside around Litchfield and getting to know our many friends in the community who share an appreciation of wildlife and wild places. Here at the Sanctuary, the sounds, shapes and marvelous adaptations of our feathered denizens continually remind me of their fragile natural ecosystems, from wetlands and rivers to islands and coastal areas. I am passionate about preserving these wonders, and hope to bring that enthusiasm to what the Sanctuary offers the community, continuing the legacy that was started by Dr. and Mrs. Ripley right here in Litchfield.

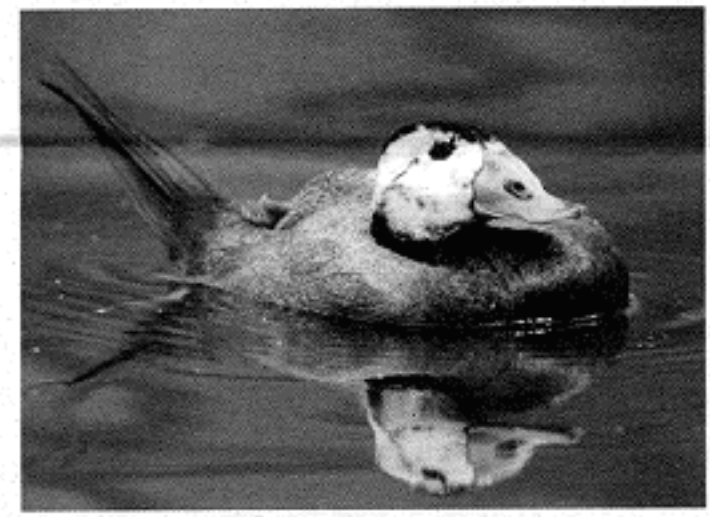
Two of the Sanctuary's ponds. *Photo: Michael Bean*

New Arrivals at the Sanctuary

By Ian Gereg, Staff Assistant

On June 1st, 2001, the Livingston Ripley Waterfowl Sanctuary's two newest species, the White-Headed Duck and the Bewick's Swan, arrived safely in Litchfield after an overseas trip from Holland and a month-long stay at the US quarantine station in New York. Neither of these species has ever been held by the Sanctuary before, and both are very rare in North American collections. The White-headed Duck *(Oxyura leucocephala)* and the Bewick's Swan *(Cygnus bewickii)* are native to Europe and to Asia, with no wild populations in the Americas (though the Bewick's Swan is a rare visitor to western N. America) and very few at all in captivity. We are thrilled at the prospect of attempting to breed these birds, continuing our tradition of rare waterfowl conservation and propagation.

The White-Headed Duck is a beautiful member of the stifftail family and is a European relative of the North American Ruddy Duck, one of the smallest and most beguiling of the diving ducks. Adult males sport a black crown on their white heads. The black neck fades to chestnut on the breast, while the back is a barred gray. The tail is long and black, and the underbelly is pale gray fading to white. The most stunning coloration on the males during the breeding season is the bright blue bill, which is swollen at the forehead giving the beak the appearance of a heavyweight boxer's nose after a tough match! Females are similar in coloration to female Ruddy Ducks, but a white streak below the eye sets them apart immediately, as does their larger size and swollen bill. Even day-old ducklings have the swollen bill of the adults. The White-Headed Duck also has one of the longest tails in the stifftail family, providing them with another common name, the Spine-Tailed Duck.



Male White-headed Duck *(Photo: Darryl S. Nicholson, Jr.)*

White-Headed Ducks have an unusual diet: they are omnivorous, eating both aquatic animals and plants. The young ducklings consume aquatic insects almost exclusively in the early stages of development. The primary method of food acquisition is diving. These adept divers can remain submerged for almost a full minute while foraging.

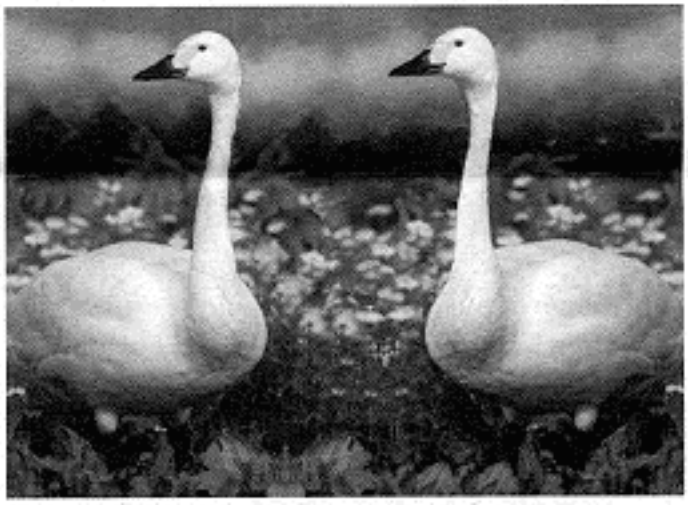
In the wild, the White-Headed Duck can be found as a permanent resident in southern Spain, southern Russia, and central Asia. The majority of the Russian population winters in central Turkey on Lake Burdur Golu. Reedy lakes and lagoons with large concentrations of aquatic vegetation are preferred breeding grounds; the breeding season begins in late May and continues through June. The species nests in reeds or cattails, with most nests being quite close to the water's edge and very well concealed. Old Coot nests are often used, as are floating mats of vegetation. An average clutch consists of seven eggs, with an incubation time of 25 days. The ducklings are large and well-insulated at hatching and can dive for food within minutes of leaving the nest. They forage for their own food and become independent from their mother as early as 20 days after hatching.

The White-Headed Duck is regarded as endangered in Spain and is listed as "vulnerable" throughout the rest of its range by the International Council for Bird Preservation. Its decline is partly the result of wetland destruction, pollution, illegal hunting and egg collecting and the increased use of pesticides that run off into fragile aquatic ecosystems. The biggest threat to these beautiful little stifftails, however, is the accidental introduction of the North American Ruddy Duck into Europe in the 1950's. Male Ruddy Ducks (and their hybrid offspring) are socially dominant over male White-Headed Ducks during the breeding season, further infiltrating the White-Headed Duck gene pool with Ruddy Duck blood. Wild hybrids are increasingly more common, making the Ruddy Duck a major contributor to the White-Headed Duck's increasing scarcity.

Male Ruddy Duck (Photo: Darryl S. Nicholson, Jr.)

The other new import for the Livingston Ripley Waterfowl Sanctuary, the Bewick's Swan or Eurasian Tundra Swan, is a dainty little swan, the smallest and most land-oriented of all the northern swans. This species is about a third of the size of the Whooper Swan, which we also keep at the Sanctuary. It gets its name from Thomas Bewick, the 18th century English bird illustrator and wood carver.

Most pairs of Bewick's Swans nest far north inside the Arctic Circle, remaining for only about 130 days during which they make a nest, lay the eggs, hatch the clutch, and raise the cygnets to flying age. Nesting takes place on the inaccessible tundra, which has served to protect the nesting areas from human disturbance for the time being. Bewick's Swans form extremely strong pair bonds, and when a partner is lost, it can take up to three years for the surviving bird to accept a new mate. The swans can be aggressive during the breeding season with other swans, defending large areas of the tundra from other pairs.



Bewick's Swan (Photo: Darryl S. Nicholson, Jr.)

Surprisingly, although the Bewick's Swan is the smallest of the northern swans and lays the smallest clutch, the females lay the largest eggs in proportion to body size. Because of the brief breeding season on the arctic tundra, the Bewick's Swan has the shortest incubation period of any swan at only 29 to 30 days. Cygnets hatch large and strong and are vigorously protected by the cob, while the female leads the young to safety. Bewick's Swans also have the