



*The Galapagos Dove is the only endemic dove found on these islands.*

## Avian Diversity of Galapagos

by Liza Marie Wallner  
Milwaukee, Wisconsin

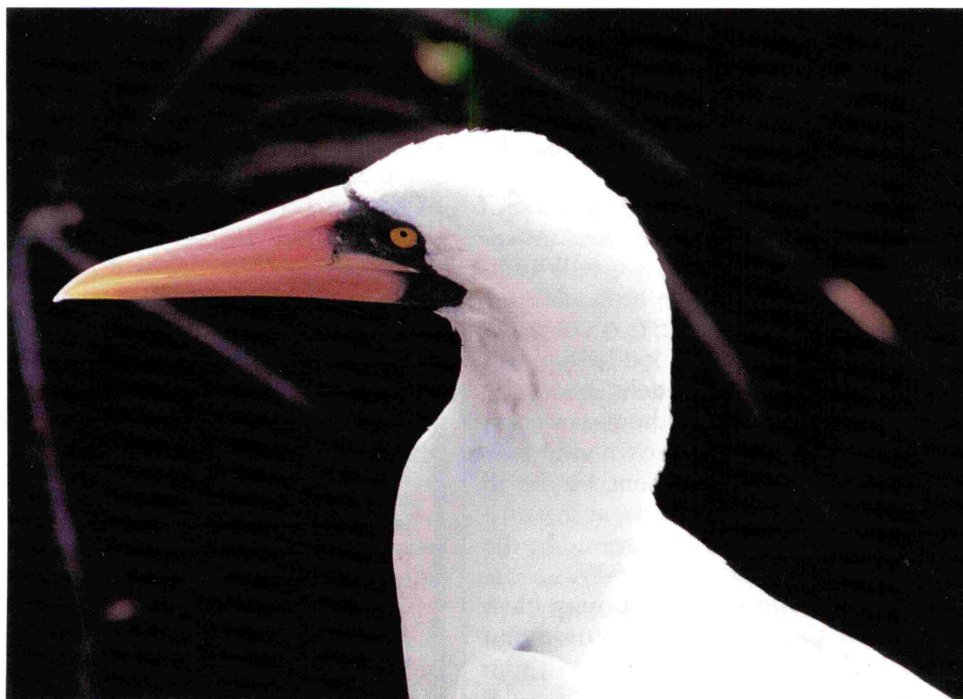
**T**he evolutionary isolation of the Galapagos Islands has produced a rich diversity of unusual avifauna, many species being found nowhere else in the world.

Fifteen major islands comprise the archipelago which is located approximately 600 miles west of the Ecuadorian coastline in the Pacific Ocean on and around the equator. I was able to visit 12 of these on my two week sailing and hiking exploration of the islands, observing at close hand many of the birds I am about to list and describe.

Endemic or unique birds to the Galapagos Islands include 13 species of the famed Darwin's Finches, four species of mockingbirds, two species of gull, the Galapagos Hawk, flightless cormorant, Galapagos Penguin, and a



*Camping on the rim of Isabella Island's Alcedo Volcano was an excellent place to observe the Galapagos Hawk. This bird is immature.*



*The largest booby species found on the Galapagos is the Masked Booby which has an orange beak with a black face mask.*





*There are three resident booby species found on the Galapagos Islands. They include the Red-footed (pictured), Blue-footed and Masked Boobies.*

12,000 pairs, with the exception of the several pairs mentioned in my introduction, nest exclusively on Hood Island, Galapagos. This magnificent bird, with its bright yellow beak, cream colored head and brown body feathers, is known for its unique courtship display involving clicking, freezing, head bobbing and beak crossing. This ritual is repeated each year at the onset of breeding season to reaffirm each pair's lifelong bond before mating takes place. Nesting



*The Galapagos Waved Albatross nests in a huge colony of approximately 12,000 pairs on Hood Island.*

single endemic species each of dove, flycatcher, martin, heron and rail. The Galapagos Waved Albatross is almost considered endemic with the exception of two or three pairs which breed on small islands off Ecuador's coast.

The islands are probably best known for the three resident booby species; however, other interesting bird species also reside in Galapagos including two species of owls, two species of frigatebirds, flamingos, Vermillion Flycatchers, Red-billed Tropicbirds, Brown Pelicans and American Oystercatchers to name just a few.

Natural behavior observations and close-up viewing of the birds on Galapagos is an easy matter as animals of these relatively young islands have not developed a fear of humans. It is an amazing thing to simply walk through a breeding colony of birds, many of which are on eggs or with chicks, and cause no reaction whatsoever.

The most spectacular bird seen on my trip was the Waved Albatross *Diomedea irrorata*. The entire colony of



*Many birds were not afraid and could be approached quite easily. This is a Blue-footed Booby with her chick.*

Photos by Liza M. Wallner



occurs from May to December after which the young are fledged and the whole colony leaves Hood Island to spend the rest of the year out at sea.

I was in the Galapagos during December 1993 and January 1994 so I was able to see the adult Waved Albatross with almost fully fledged chicks. They were all huge, impressive birds having wingspans of up to 10 feet and body weights approaching 11 pounds.

My adventure also allowed for a special hike and two nights camping on the rim of Isabella Island's Alcedo Volcano. This is one of the best places to see the Galapagos Hawk *Buteo galapagoensis*.

Adult birds are solid brown with yellow cere, talons and legs while the juveniles have cream colored breasts with a brown mottled pattern. The female birds tend to be larger and they take on more than one mate at a time. All parents then help in the raising of the young.

Immature hawks were seen up to one dozen at a time along Alcedo Volcano's rim. They would swoop down inches above my head, occasionally landing on a nearby rock or shrub. Another fascinating encounter I had

with a Galapagos Hawk happened on Rabida Island which is known for its red sand beach. It was along this shoreline that several brown pelican nests were spotted in some shrubs, one with three abandoned eggs. As I approached a second nest, I saw a hawk perched atop it with its kill, a down-covered pelican chick. These hawks feed on everything from small lava lizards to young goats if they can get them.

This intriguing raptor has been eliminated from many of the islands by direct human predation in the past. Although now protected, this species' total population has been reduced to about 100 pairs. They have no natural enemies, which would explain their curious and fearless natures.

No exploration of Galapagos would be complete without a chance to see the unique flightless cormorant *Nannopterum harrisi*. It is also endemic to the archipelago, being found only on Isabella and Fernandina Islands. This Galapagos Cormorant is the only flightless seabird in the world with the exception of the penguin. As there were no predators when this bird arrived on the islands, it almost certainly evolved into a flightless state. Natural selection simply favored the birds with smaller wings and sturdy, streamlined bodies which are advantageous for diving and feeding off the rocky lava shorelines of Galapagos.

I observed many of these cormorants at Punta Espinosa on Fernandina Island. They feed mainly on fish and squid and must sun themselves dry after diving as they lack water repellent feather oils which other birds have. December is not noted as their breeding season. However, I did see one parent and chick on a nest high on a cliff at this same location.

Although they are not endemic, Galapagos is probably most famous for its three resident booby species. The Blue-footed Boobies *Sula nebouxi*, with striking blue feet at maturity, are the most noticed birds of the archipelago. Large colonies are found on Hood and Seymour Islands. I observed young chicks still in down feathers on Hood at the breeding colony there. These birds nest inland on the ground and raise from one to three young depending on food availability. They feed on fish taken near the shoreline of the ocean.

Adult Blue-footed Boobies can be

distinguished sexually by looking at their eyes. Males have smaller-looking pupils than females. In reality, the pupils themselves are the same size in both sexes. It is the dark brown iris ring around the pupil of the female's eye which makes it appear larger. Females also have a bigger overall body size and make a honking sound. The males, on the other hand, are smaller and have a call which resembles a whistle. They usually make this whistling sound while pointing their beaks skyward.

The largest of the booby species to reside in Galapagos is the Masked Booby *Sula dactylatra*. This bird has an orange beak surrounded by a black face mask. The wings and tail are also edged in black which is in dramatic contrast to its white head, neck and body. Breeding takes place throughout the archipelago at different times of the year on different islands. I saw courtship behavior, including males skypointing, on both Hood and Tower Islands. Nests are made near the cliffs and consist of a small collection of twigs. Two eggs are then laid and the first chick to hatch is usually the only one to survive. Masked Boobies fish for food in between the islands further out to sea than their Blue-footed relatives.

The final and most numerous booby species of the islands is the resident Red-footed Booby *Sula sula*. Adult birds have brightly colored, red, webbed feet at sexual maturity. Although quite populous, the 140,000 pairs of this species are difficult to see as they nest only on the outlying Island of Tower. This is also the only booby to nest in trees or shrubs, females laying but a single egg. The Red-footed Booby feeds very far out in the open ocean, thus avoiding any competition from other booby species. Hundreds of fledged immature birds were observed on Tower during January of 1994. Adults were also seen perched on their treetop nests. Immature boobies are a dull brown color, whereas adults are lighter with blue beaks which are masked in pink around the face. This is the smallest of Galapagos' resident boobies.

The Galapagos Islands have much to offer any avian enthusiast in both diversity and uniqueness of species. It is my hope that this remarkable archipelago can be preserved for future generations to enjoy. ●

## Deadline Schedule

### Nov / Dec '94

Sept. 1 — editorial copy  
Sept. 15 — display ADS

### Jan / Feb '95

#### Featuring HANDFEEDING

Nov. 1 — editorial copy  
Nov. 15 — display ADS

### Mar / Apr '95

Jan. 1 — editorial copy  
Jan. 15 — display ADS

### May / June '95

Featuring  
**AMAZONS**  
March 1 — editorial copy  
March 15 — display ADS

### July / Aug '95

May 1 — editorial copy  
May 15 — display ADS

### Sept / Oct '95

Featuring  
**LORIES**  
July 1 — editorial copy  
July 15 — display ADS

# YOUR BIRD DESERVES THE VERY BEST!

\$269.00

Standard size: 24Wx28Lx48H approx.



5 YEAR WARRANTY



- Optional Hand-Carved Posts are available in limited quantity. Each post is truly "ONE OF A KIND"!

- Textured surface for maximum grip!

## ENCLOSURE PERCHES

*This is one perch you will not have to replace!*



FREE CUSTOM SIZING!

12" thru 48" Range: \$16.00 - \$32.00 each

*You will not find higher quality, longer lasting products than White Bear.*

## AVIAN ENTERTAINMENT CENTER

- Perches easily removed & dishwasher safe
- Lexan® tray guards
- Multiple perching diameters

NEW RELEASE!

\$29.95 EACH



## THE VERSA-T!

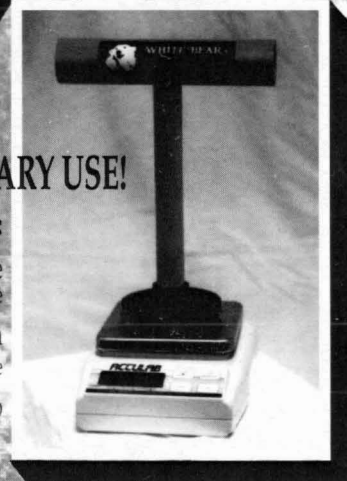
- Shower
- Car
- Countertops
- Windows, etc.

30 LB. holding strength

## FOR VETERINARY USE!

### USED BY:

NC State  
College of Veterinary Medicine  
University of Georgia  
College of Veterinary Medicine  
Indianapolis Zoo



Scale not included

*All White Bear Products have been designed using the advice of this country's top avicultural veterinarians, insuring features that best promote the mental and physical strengths that will help make your bird the kind of companion you've always desired!*



ORDER TODAY!



Freight Prepaid - Cont. USA

**WHITE BEAR PRODUCTS**  
Division of Gary Dorman & Associates, Inc.  
P.O. Box 501155 - Indianapolis, Indiana 46250  
(317) 849-9637 Fax (317) 577-2573  
*Dealers Always Welcome!*

Call Today For Free Color Brochure!  
(317) 849-9637  
Find out why White Bear Products  
last a LIFETIME!



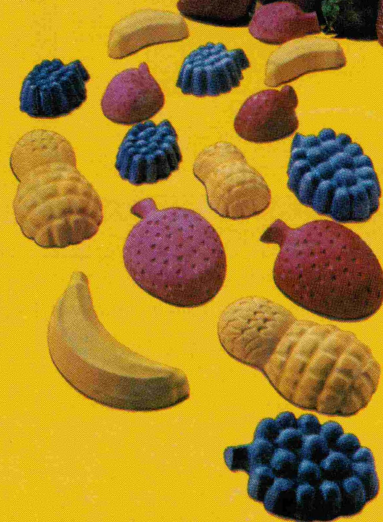
# SUNTHING™ NEW!

## FRUIT SCENTED & SHAPED SUNSCRIPTION™ MINERAL TREATS

New, SUN SEED "SUNSCRIPTION™" Mineral Treats are prescribed to provide essential calcium and minerals to supplement your bird's diet. Their unique shape is designed to encourage chewing exercise and help maintain proper beak condition. Your bird will find these colorful, fruit scented Mineral Treats attractive and a bright addition to its environment. The fruit scent helps keep your bird's cage smelling fresh. Choose from a variety of flavors. Two sizes are available for large and small birds.



OFFICIAL  
SPONSOR OF THE  
AMERICAN FEDERATION  
OF AVICULTURE



IT'S SUNTHING SPECIAL™

SUN SEED GUARANTEE  
If you're not totally satisfied  
with a SUN SEED product,  
simply return the unused  
portion for replacement,  
substitution or a full refund.



SUN SEED CO., INC. • Box 33, Bowling Green, Ohio 43402