



**NEST BOX SUCCESS IN GREAT SWAMP NWR IN 2010**

Leo Hollein

The Great Swamp National Wildlife Refuge (GSNWR) covers approximately 7600 acres in Morris Co. in northern New Jersey. Since 2001, volunteers from the Friends of the Great Swamp NWR have maintained a bluebird nest box trail in the refuge (Hollein 2007). The boxes are set up in pairs and monitored to determine the nesting success.

In 2010, for the fourth time in five years more than 200 Eastern Bluebirds fledged from the refuge's bluebird nest boxes. The total of 254 fledglings surpassed the previous record of 249 fledged in 2008. For the second time in three years there were more Eastern Bluebird nestings and fledglings than for Tree Swallows (Chart 1).



Female Eastern Bluebird feeding fledgling.  
(Photograph by Steve Byland.)

The bluebirds had a longer nesting season in 2010. This could be an anomaly or a trend; only time will tell. The first bluebird egg was laid March 28. This was the first time in at least ten years a bluebird egg was laid in March in the GSNWR. The previous earliest egg date was April 5. The last bluebird nest was started July 21. This was same date as previous late date, July 21, 2009. One bluebird pair fledged three clutches – also a first. In most years a blue-

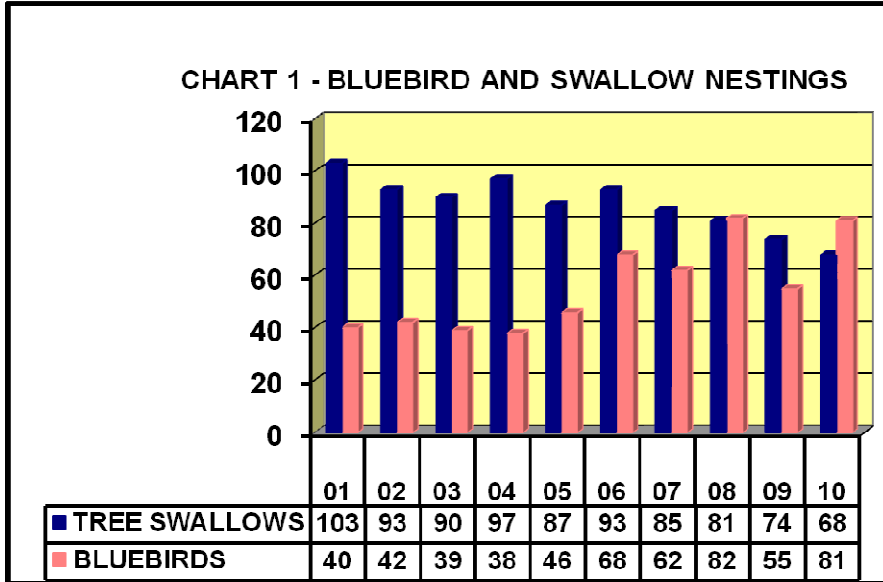
bird pair or two will lay three clutches but in all previous cases one or both of the first two nesting attempts had failed. The window for

bluebird nesting is limited due to their practice of feeding their young for several weeks after they fledge before attempting another clutch.

weather. In May there was a three day period of persistently high daytime winds of 20-30 MPH. This severely hampered adults foraging for food for the developing hatchlings. Three

clutches starved as well as individual hatchlings in other clutches. In July there was a four day period with daytime highs ranging from 94-101° F. The temperature inside the nest boxes in open fields was undoubtedly higher. Bluebirds can warm their eggs to maintain them at the desired incubation temperature of 95-100° F; however, keeping them below the upper temperature is a problem. Four clutches of eggs laid in late-June failed to hatch as high ambient temperatures overheated the eggs. Only one egg of four in another clutch hatched. The number of

fledglings would have been significantly higher without the periods of very high temperatures and high winds.



The mean temperature in April was 54.3° F versus the average of 51.3° over the previous six years. Unusually high temperatures in late-March and in April spurred early spring growth. Bluebirds started a record thirty-seven nests in April. Eventually 73% of the forty-five pairs attempted a second nest versus an average of 57% in prior years. Twenty pairs fledged two clutches.

The weather both helped and hurt reproduction in 2010. While the early warm weather gave the bluebirds an early start, May and July weather hampered nesting and reduced the number of fledglings. Chart 2 presents data on nest failure (no fledglings) for the last seven years. Nest failure in 2010 was slightly above the 19% average; however, nest predation (7% of total nests) was low. Predator guards placed on nest posts in areas subject to raccoon predation were evidently effective or perhaps the raccoons exploited other food sources this season. Fledgling starvation and nest abandonment (7% of total nests) were high due to

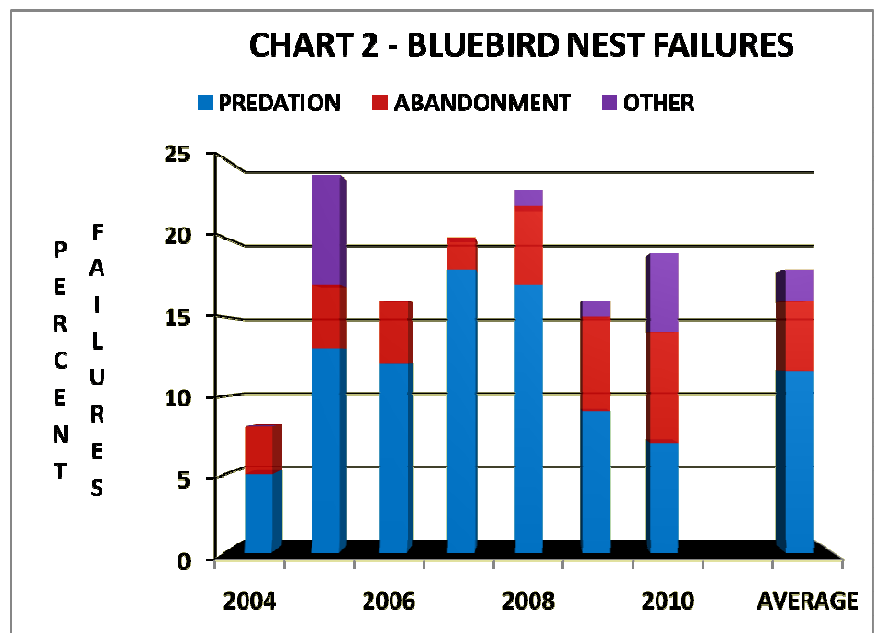
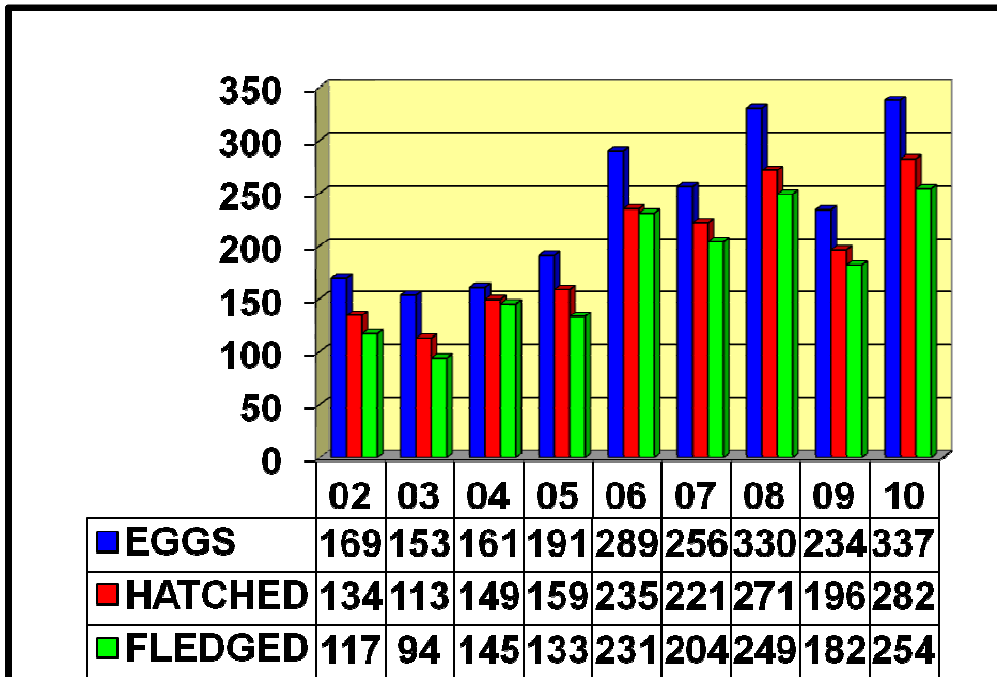


Chart 3 summarizes bluebird nesting data for the last nine years. As indicated bluebirds in 2010 laid more eggs and had more hatchlings than in any previous season. Seventy-one percent of the nest box pairs had nesting bluebirds during the season.



**CHART 3 - BLUEBIRD NESTING HISTORY**

In addition to Eastern Bluebirds, Tree Swallows use the nest boxes in GSNWR. The history of Tree Swallow nesting for the last ten years is presented in Chart 4. The decrease in swallow eggs and fledglings from the earlier years (2002-2007) is due primarily to the relocation of nest boxes. The original positioning of nest boxes was in low, wet habitat around and between Pools 1 and 3 where there is an ample supply of flying insects for the swallows to feed on. In 2010 the remaining boxes in these areas (Units 1 & 2) had swallows nesting in 90% of the box pairs. Unit 3 has nest boxes along New Vernon and Meyersville roads. There were no nest boxes in this area prior to the 2003 season. Tree Swallows nested in only 60% of the box pairs in Unit 3 where the higher and drier habitat is less attractive to swallows. The pairing of boxes completed prior to the 2006 season also reduced the number of potential swallow nesting sites but increased the nesting opportunities for bluebirds.

Tree Swallows fledged 242 young in 2010. This was more than in 2008 (206) or 2009 (234) even though there were fewer nests and fewer eggs laid in 2010. The swallows had fewer failed nests in 2010 as nest

box predation was low due to installation of additional raccoon predator guards in the fall of 2009.

For the first time in at least ten years House Wrens failed to fledge any young from the nest boxes. Wrens fledged an average of nearly thirty young in the previous nine years. Wrens built three stick nests in separate boxes but only laid eggs in one. It is common for wrens to make multiple false nests that are not used. The one

clutch of wren eggs failed to hatch.

Nesting attempts by House Sparrows were reduced by 50% from 2009 to 2010. House Sparrow clutches were reduced from twelve to six. Nest boxes used by sparrows were eight in 2009 and four in 2010. Unit 4 Box 16A had three House Sparrow nesting in 2009 and two in 2010. This box and its pair will be relocated for the 2011 season in an attempt to discourage nesting sparrows. The sowing of copious amounts of grass seed along the new entrance road in 2009 was the likely cause for the ten sparrow nestings in that area in 2009. There were only three sparrow nestings in that same area in 2010. It is likely the visitor center feeders will attract House Sparrows that will attempt to nest in nearby bluebird boxes in the future. As is the Refuge practice all the House Sparrow nestings were disrupted to prevent any sparrows from fledging.

Since the conical predator guards helped reduce nest box predation in 2010, we plan to fit more nest boxes with predator guards in areas subject to raccoon predation. As is done every fall, a number of nest box pairs located in areas no longer attractive to bluebirds due to changes in vegetation will be relocated to what appear to be more productive sites. Another pair of boxes will be relocated to the

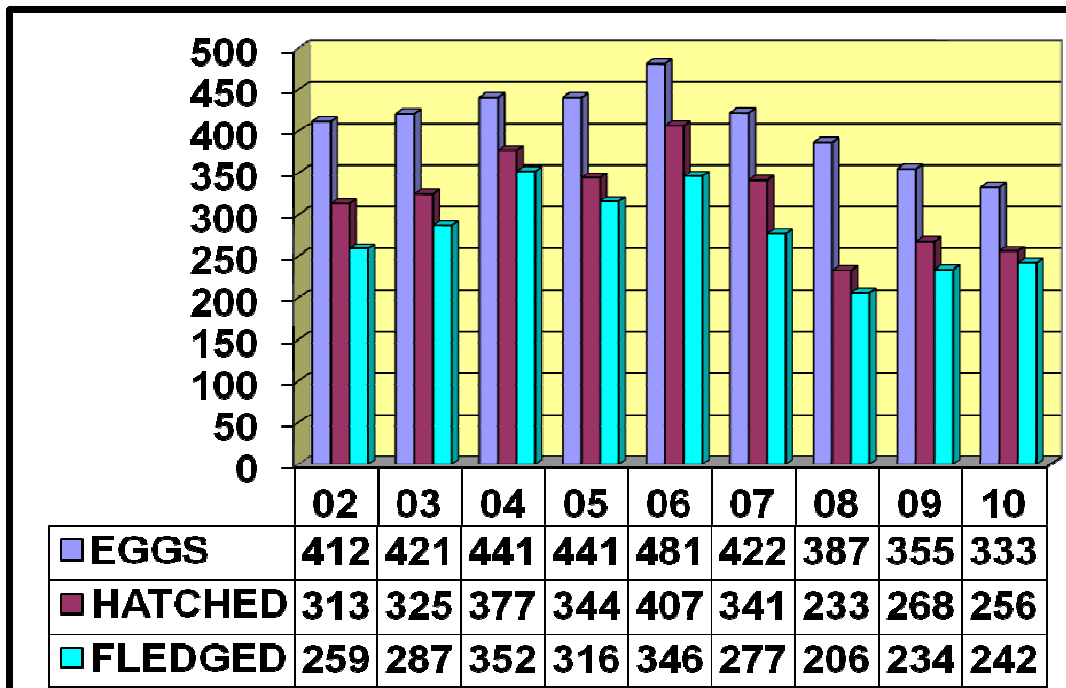
large field to the south of the new visitor center. This field is scheduled to be mowed annually and has proven to be productive for bluebirds. A single box will be placed in the field in back of the Refuge owned house in Meyersville (formerly occupied by Colin Osborn). Colin always had bluebirds but never Tree Swallows in this area. He moved his boxes to his new home. A single bluebird box was also placed in the yard of the Refuge house at 150 Long Hill Lane. A total number of 139 songbird boxes will be monitored during the 2011.

The Friends have purchased a nest box camera (nest cam) for use in a bluebird box near the new visitor center. Bluebirds fledged two clutches from this box in 2010. Live video from the camera will be displayed in the visitor center. We will assist the Friends in the installation when permission to proceed is received from the Refuge staff.

Finally, many thanks to Nancy Felicito, Roz Mytelka and Lou Pisane who monitored nest boxes and reported their findings on a weekly basis during the 2010 nesting season. Thanks also to Lou Pisane for his help in maintaining and modifying the nest box trail during the off-season. Thanks to Paul Ford for building new boxes and repairing others for the trail. [This article is based on a report to the Great Swamp National Wildlife Refuge.]

**Literature Cited**

Hollein, L. 2007 Revitalizing a Bluebird Nest Box Trail. *Linnaean News-Letter* December 61(7).



**CHART 4 - TREE SWALLOW NESTING HISTORY**



## LINNAEAN SOCIETY OF NEW YORK ANNUAL DINNER REPORT

Kathleen Howley

A total of seventy-one members and guests attended the Society's annual dinner on Tuesday, March 8, 2011, held at the Liederkrantz Association. From the many favorable comments I heard from attendees, it was a successful affair. And, with the help of funds raised from the raffle, the Society's balance sheet for the dinner ended in the black.

Alvaro Jaramillo was awarded the Society's Eisenmann Medal, given for excellence in ornithology and encouragement of the amateur birder. With the publication of the *Birds of Chile*, in both English and Spanish, and his many other publications, Alvaro Jaramillo more than fulfilled those criteria. The book is the first reliable guide not only for the birders of Chile, but also for the population as a whole. It may be the first time many Chileans learn about the beautiful and diverse avifauna in their country. During Alvaro's presentation, we took a vicarious trip to Chile, where we saw photographs of many of the endemic birds found there, along with an informative narrative, and, of course, views of magnificent scenery.

Alvaro is also the coauthor with Peter Burke of *New World Blackbirds: The Icterids*. You can find Alvaro on Facebook and on his website: [www.alvarosadventures.com](http://www.alvarosadventures.com).

The Shelda Taylor Award was given to Thom Schuchaskie in recognition of his work in introducing children to the great outdoors. In 2006, Thom founded Urban Kid Adventures, a series of after-school programs designed to get children into the parks to identify birds, trees, or whatever in nature interests them. In a recent article in *Spry Living* magazine, Thom said this program has become so popular with parents they want to hold a lottery to fill the spots. Thom well deserves recognition for creating this wonderful resource for the children living in New York City.

For those members who did not attend the Annual Dinner, below are the various reports for 2010 that were read by the Secretary.

### Great Gull Island Report - 2010

The new dock launched an exciting season in 2010. We recovered 22 geolocators put on Common Terns in 2009. Joe DiCostanzo is now analyzing the data. Adults of this species were so well fed that the volunteers carried umbrellas as they moved between the buildings for protection from the inevitable rain of droppings. Survival of young was higher than in any previous year and we banded 11,000.

Sixteen people worked in the colony during the peak hatch. In addition to trapping many banded adult Common Terns, they trapped over 1000 unbanded birds. This is an unusually high number of unbanded adults to be trapped on Great Gull Island in any season. It is probable that many of these birds formerly nested in a colony on Cartwright Island, a large sandbar lying SE of Great Gull. Cartwright was under water at high tide in 2010.

Thanks to all of you who did the Great Gull Island Birdathon or contributed to it last year. Chuck McAlexander's efforts have been particularly supportive. I don't think Chuck lets anyone walk out of his musical repair shop, known as BrassLab, between March and the end of June without pledging or giving something to the Great Gull Island Project. Birdathon contributions help us protect and monitor the largest colony of Common Terns in the world and the largest nesting concentration of the endangered Roseate Tern in the hemisphere. Based on 2010 numbers we look forward to a record-breaking season in 2011.

Respectively submitted,

Helen Hays, Chairman  
Great Gull Island Committee

## Membership Report

As of March 8, 2011, there were 395 members. The breakdown is as follows:

Active	-	218
Associate	-	42
Supporting	-	37
Life, Honorary, Fellow	-	98

During 2011, 15 new members joined the Society.

It is with much sorrow that we note the deaths of Elizabeth Manning, a life member since 1937; Ann Gaylord, a life member since 1976; Fred Bunker Davis, a life member since 1964; Frank Bader a member since 1966; and Martha Grutchfield, a member since 1980.

Respectfully submitted,  
Kathleen Howley

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## Field Trip Committee Report for 2010-2011

A total of fifty-nine trips have been scheduled for the 2010-2011 Linnaean Society Field Trip season. As usual, most trips are close to home, with forty-two in New York City, nine elsewhere in New York State, five in New Jersey, one in Connecticut, one in Massachusetts, and one in Maine. There were three overnight trips; unfortunately, two so far, to Cape Ann and to Montauk, were cancelled for various reasons. We have hopes the trip to Maine in June will have better success.

This season was no different from previous seasons, with problems involving car pool transportation and weather conditions. Some trips had to be cancelled; however, creative solutions were found for others. Several trips were rescheduled in better weather, and one trip had participants take a train to meet the leader and his car in New Jersey. They were rewarded with a target of six White-winged Crossbills.

This past fall, Linnaean field trippers were treated to two New York State first record birds: one a Common Ground-Dove at Captree State Park on a Leader's Choice for Rarities trip; the other on a trip that started in Rye Playlands, went on the Stamford, CT, for a Fork-tailed Flycatcher, then finally to Long Island for a first record Hermit Warbler in Sunken Meadow State Park. Linnaean members can really burn up the miles to get their birds!

The Central Park Tuesday trips were successful in the fall migration, as were a few Friday trips in other city parks. Both these series will continue again in the spring, no registration necessary. With the coming warm weather, we again have trips focusing on plants, butterflies, and bats, as well as birds. This will be a welcome change from trudging through knee-deep snow in Pelham Bay Park, although the Long-eared Owl was worth it!

Many thanks to all those who make these adventures possible: to the Leaders who plan exciting and creative trips, to the Registrars for coordinating arrangements and persisting in resolving difficult problems, for drivers who provide transportation, and for participants who bring their spotting skills and enthusiasm. Please come and join us in the field.

Field Trip Committee: Lenore Swenson, Chair, Anne Lazarus, Starr Saphir, Sandra Maury

## Meetings Report, March 8, 2011

During the year, from March 9, 2010 through February 22, 2011, fifteen regular meetings and three workshops were held; all at the American Museum of Natural History. There were six speakers from out of town, and nine speakers from the metropolitan New York area. The complete list of programs follows. All meetings were well attended with attendance ranging from forty to seventy members and nonmembers. The topics for our lectures were generally on various aspects of bird ecology.

March 9, 2010  
**Linnaean Society Annual Dinner – The Extraordinary Diversity of Himalayan Birds**  
Trevor Price, University of Chicago

March 23, 2010  
**Recent Changes in Status and Distribution of New York State Birds: Detection vs. Population Expansion/Contraction**  
Shaibal Mitra, College of Staten Island

April 13, 2010  
**Bird Diversity in a Neotropical Country: Costa Rica**  
Rafael Guillermo Campos-Ramírez, Caligo Ventures, Inc.

April 27, 2010  
**Members Slide Show**  
Sean Sime

May 11, 2010  
**Why Are There More Bird Species in Some Areas of the World Than Others?**  
David L. Pearson, Arizona State University

September 28, 2010  
**Australasia – The End or the Beginning of Modern Birdlife**  
Richard Schodde, Australian National Wildlife Collection

October 12, 2010  
**Preventing Avian Mortality at Windows: A Review of Existing and Promised Methods and Challenges Associated with Their Use**  
Daniel Klem Jr., Muhlenberg College

October 26, 2010  
**The Evolution of Beauty**  
Richard Prum, Yale University

November 9, 2010  
**Nature's Palette: The Wonders of Bird Coloration**  
Geoffrey Hill, University of Auburn

Workshop at 6 PM: **Behind the Scenes in Ornithology at AMNH**  
Mary LeCroy, American Museum of Natural History.

November 23, 2010  
**Wildlife Consequences of the Deepwater Horizon Oil Spill**  
Michael Fry, American Bird Conservancy

December 14, 2010  
**Causes and Consequences of Family-Living in Birds**  
Dustin Rubenstein, Columbia University

January 11, 2011  
**A Taste of Spring: Warblers of the Metropolitan Area**  
David Speiser, New York City Audubon, wildlife photographer

January 25, 2011  
**The Biology and Ecology of North American Birds of Prey**  
Peter Capainolo, American Museum of Natural History

February 8, 2011  
**Avian Distributional Changes over a Century of Climate Change in California**  
Morgan Tingley, University of California at Berkeley and American Museum of Natural History

February 22, 2011  
**The Evolution of Bird Behavior**  
David Lahti, Queens College, City University of New York

Workshop at 6 PM: **Behind the Scenes in Ornithology at AMNH**  
Mary LeCroy, American Museum of Natural History.

Submitted by Alice Deutsch, Vice President

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## Treasurer's Report – 2010

In 2010, the Linnaean Society had income of \$21,000. Major components of income were membership dues of \$11,000 and donations of \$8,000. Donations included a bequest from the Estate of Paul Baur of \$5,000 and a contribution from Roberto Eisenmann to the Eisenmann Fund of \$2,000.

Expenses for the year were \$15,000, with the majority going toward hosting our meetings, at \$11,000.

The Society had net income greater than expense of \$6,000. But excluding the generous, major and nonrecurring donations, the Society had an operating loss of \$1,000.

Respectfully submitted  
Stephen Chang

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### ALVARO JARAMILLO 2011 EISENMANN MEDALIST

Helen Hays

Alvaro Jaramillo, our 2011 Eisenmann medalist, spoke at the Linnaean Society annual dinner March 8, 2011. In his introductory remarks he mentioned that in his reading about birds of South and Middle America he discovered Gene Eisenmann's publications and had long admired the work he did. Therefore he was particularly pleased to be selected to receive the Eisenmann Medal and thanked the Linnaean Society for choosing him to do so.

Born in Chile, he moved with his family to Canada when he was six. Interested in birds at an early age he used to ask his father what birds were found in Chile and his father would answer giving him the local names of a number of common birds.

As he became more familiar with the birds of Chile, he wanted to write a field guide to make it easier for people to identify the birds of that country and to easily be able to relate the scientific names to the common

names as he had been able to do with some difficulty after his father had given him the common names of birds he knew in Chile. In Alvaro's talk he introduced us to many of the strikingly beautiful habitats in Chile and showed us some of the birds found in them. We traveled from the Andes above Santiago where we saw in a marshy pasture the Diademed Sandpiper-Plover to a forest where a Rufous-tailed Hawk, similar to our Red-tailed Hawk, flew away between the trees. He also showed us a number of tapaculos whose loud calls alert the observer to their presence and with a little patience the observer can also see them. We saw the concentration point on the coast where the Red Knots gather and are counted annually, counts which indicate that in a six year period the numbers of this species dropped from 51,200 to 17,200.

Alvaro was particularly pleased when *Birds of Chile* was published with a Spanish text. Since this occurred bird observers in Chile have multiplied and today there are noticeably more bird watchers. They are discovering new things about birds and discovering new species in areas unexplored previously. For a long time no one in the northern hemisphere knew where swifts wintered. Now our North American swifts are being detected in flocks of swifts flying over Chile during migration.

At the end of the talk Jaramillo emphasized the amateur's contribution to ornithology in Chile and how lucky we were to work in a discipline such as the study of birds where both amateurs and professionals can and do make contributions and should be encouraged to do so.

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### LINNAEAN NEWS-LETTER

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