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The Stilt

Vol. 16 No. 2 Summer 1997

The Newsletter of the San Francisco Bay Bird Observatory

Bair Island

Its Past, Present and Future by Janet Tashjian Hanson

In 1967, a colony of herons and egrets were discovered on the outer portion of Bair Island in San Mateo County. Those that undertook study of the colony formed the founding core of SFBBO (see Mike Rigney's accompanying article). Our organization took root at Bair and we've remained extricably bound to its fortunes ever since, wincing at each new proposed development scenario. How refreshing to witness this reversal of its fate. Bair's acquisition by POST in April of this year renews our optimism and our commitment to the goal of preserving the Bay's birds and their habitats.



Bair Island's Past

The End of an Odyssey

by Michael Rigney

A journey which began on a spring day in 1977 on a remote island in San Francisco Bay, came to a close at the beginning of this year in Sunnyvale. The closing chapter came in the form of a "Report to Bander", a nondescript government printout from the U.S. Bird Banding Laboratory in Laurel, Maryland. Only three lines long and coded with numbers and terse abbreviations, the "report" indicated that a Great Blue Heron with band number 0977-07131

was recovered dead by Curtis Black somewhere in Sunnyvale on January 13, 1997.

The beginning chapter of this story was written by an eager group of college students and a dedicated college professor, ecologist and conservationist, Dr. Richard Mewaldt (Dick to most of us). During the early 1970's, Dr. Mewaldt and graduate student Bob Gill, operating as the Avian Biology Laboratory, had conducted extensive breeding bird surveys of San Francisco Bay's tidal marshes,

salt ponds and levees. One location in particular, Bair Island, stood out as one of the most productive breeding areas in the entire estuary. During the ensuing years, Mewaldt and Gill undertook an extensive banding program focused on the several colonial nesting species on the island to better understand survival rates and dispersal patterns.

It was not unusual to find as many as six or seven nests in one bush.

On the northern tip of the island, a small dredge spoil deposit supported a dense growth of coyote brush which three species of herons found to their liking. Forming a sort of low-rise condominium complex, Great Blue Herons built their 5foot diameter nests on the tallest and sturdiest bushes, while Snowy Egrets and Black-crowned Night Herons used the lower portions of the bushes for their smaller nests. It was not unusual to find as many as six or seven nests in one bush. After Bob Gill graduated, a rag-tag bunch of Mewaldt's students (who would later found with Dick, the San Francisco Bay Bird Observatory and CCRS) took over the banding program on Bair Island. And it was on a fine spring morning in 1977 that a Great Blue Heron chick became known as 0977-07131 (07131 for short).

We know little of what happened to 07131 during the intervening years. We do know a great deal about what happened to the nesting colony where she/he (we could not determine sex at the time of banding) was born. During the remaining 70's and early 80's the colony held steady but it became evident that the coyote bushes supporting the ever growing and heavy Great Blue Heron nests were becoming old and brittle causing many of the nest bushes to collapse. At about the same time a major development proposal which would have encompassed over half of the island was submitted to voters of Redwood City. In an effort to show how important Bair Island was to the ecology of San Francisco Bay, the fledgling South Bay Institute for Avian Studies (the precursor to the San Francisco Bay Bird Observatory) worked with community activists to educate residents on Bair Islands unique natural resources. By a slim margin, the development proposal was defeated and a portion of the island, including the heron colony was added to the newly established San Francisco Bay National Wildlife Refuge.

Throughout the 1980's to the present day, the San Francisco Bay Bird Observatory (SFBBO) has conducted yearly counts of the Island's bird populations and have documented the rapid decline of what was once the largest heron rookery in the

Bay Area. Sometime during the mid1980's a ferocious predator, the eastern
red fox discovered Bair Island and the
easy meals afforded by the low nesting
herons. As a result of this intense predatory pressure and the failing coyote
brush, the Great Blue Herons abandoned
the colony for the safety of the high
voltage transmission towers and perhaps
other Bay Area heron colonies. The
Snowy Egrets left the island altogether.
The Black-crowned Night Herons still
continue to use the colony but according
to SFBBO biologists, nesting success has
been near zero.

Sometime during the mid-1980's a ferocious predator, the eastern red fox discovered Bair Island and the easy meals afforded by the low nesting herons.

While all of these events unfolded on Bair Island we know little of the major events in the long life of Great Blue Heron 07131. Did she/he continue to nest on Bair Island or was she/he one of those early pioneers of the Artesian Slough heron colony in Alviso? How many Great Blue Herons owe their existence to 07131? How many times did you unknowingly watch 07131 feeding in the marshes and wetlands of the South Bay?

Although 19 years 8 months is a ripe old age for almost any bird, it is not a longevity record for this species. That record belongs to another bird which lived to the riper old age of 23 years.

And what of Bair Island? Just recently, the owner of the majority of the Island, Japanese industrial giant Kumagai Gumi, under intense pressure from conservationists, sold the property to Peninsula Open Space Trust (POST) for \$15 million. POST, will in turn, sell the land to the San Francisco Bay National Wildlife Refuge. The Wildlife Refuge is undertaking a major effort to eradicate red foxes from

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Mike Rigney is a Founding Member of SFBBO and currently Watershed Management Initiative Director of the Coyote Creek Riparian Station. This article also appeared in the RipariaNews, the newsletter of CCRS.



Lou Young

Mike Spence, SFBBO Board Member and organizer of Clean-up Day at inner Bair, enjoys the event with POST Executive Director Audrey Rust and Campaign Director Daphne Steward



lanet Hanson

In a rare moment out of uniform, Refuge Biologist Joelle Buffa notes signs of red fox during an SFBBO trip to outer Bair Island.

air Island. Time will tell whether that ffort will result in renewed successful esting of herons on Bair Island.

he banding efforts on Bair Island taught is a great deal about heron and egret opulations in San Francisco Bay. Great lue Heron 07131 taught us that populaons are made up of individuals with inportant stories to tell - if we only listen.

More of Bair Island's Past.....

y Janet Tashijian Hanson

Originally a tidal marsh, the area known s Bair Island was first diked in the late 800's and early 1900's. The first commerial use of the island was the establishnent of a fishing village in 1869 near the onfluence of Corkscrew Slough and ledwood Creek. In 1882, the first eclamation project was begun on the narsh. A farmer named Fred Bair, for whom the area is named, farmed on eclaimed property in the 1920's. Portions f Outer Bair were filled with dredge naterials from Redwood Creek in the arly 1900's and in 1945, there were plans o build a railway terminal on the bayside ip of the island that got as far as a road nd embankment, but were then abanloned.

n the late 1940's, the diking and inunda-

tion of the marsh began in earnest by the Leslie Salt Company. The salt evaporation ponds operated until 1965 when they were abandoned for this use. Around this time, Leslie Properties began development of Foster City and Redwood Shores, despite concerns over earthquake problems on these filled former wetlands areas. Mobil Properties bought most of Bair from Leslie in 1973 and in the following year, traded 800 acres of Outer Bair to the State of California. This property, now owned by the California Department of Fish and Game, was restored to tidal action and is now tidal marsh. An extensive development plan for remaining diked Bair lands was approved by Redwood City but defeated by a referendum in 1982. Development plans have been on hold since then.

Bair Island's Present

Under the shadow of possible development, the Observatory has continued to monitor the bird populations of middle and outer Bair Island. Although buffered by the natural barriers of Smith Slough and Corkscrew Slough, the waterbird population has not fared well in recent years. A colony of Least Terns reached a high of 52 nests in 1982, but abandoned the site by 1986. Caspian Terns and Snowy Plovers also formerly nested on Outer Bair. And the once thriving heron and egret rookery has been abandoned for the safety of the PGE towers (Great Blue Herons) and the eucalyptus grove at Redwood Shores (Snowy Egret, Great Egret and Black-crowned Night Heron).

The baywide appearance of the red fox in the early 90's and the concurrent signs of fox predation on outer Bair were apparently the final insult to the ecology of Bair.

On April 19, SFBBO participated in the Annual Spring Clean-up of inner Bair Island, organized by Redwood City's Pride and Beautification Committee. On May 6, Observatory staff made one of our periodic breeding season trips to the upland area of outer Bair Island. Accompanied by FWS staff Joelle Buffa and Jim Haas and research associates Peter Metropulos and Tim Sullivan, we surveyed for breeding attempts and for evidence of fox. The heavy winter rainfall caused more ponding than in earlier drought years and shorebirds made good use of the area during spring migration. Song Sparrows were numerous (Jim even found a carefully hidden nest) and Peter tallied 3 pairs of White-tailed Kites. A few shorebirds and egrets lingered near the ponds and several Mallard and Gadwall pairs were nesting. We flushed a Ringnecked Pheasant. Joelle spotted a lot of fox sign but it was old. Later we drove the boat up Corkscrew Slough and the fringes of tidal marsh were a lush green. Loafing Harbor Seals barely looked up as we avoided disturbing them. Black-necked Stilts, American Avocets and Forster's Terns were displaying and courting over portions of outer Bair that we hope to survey in coming months.

Continued on page 5



Of terns and salt ponds

From the Field

by Tom Ryan, Senior Biologist

BREEDING WATERBIRD STUDIES

As we go to press, our staff and volunteers have completed our second tern monitoring survey and our third heron and egret monitoring survey. This is the 17th year of this intensive volunteer effort to track the populations of the south bay's waterbird colonies. We are currently using this information to determine when and where to conduct our more intensive diurnal nest attendance pattern studies (see below). This information will also be combined with the past 16 years of surveys into a report to the Santa Clara Valley Water District, and then into a publishable manuscript.

Some season highlights so far include a colonization of Lake Merced by Great Blue Herons, and a new colony of Caspian Terns on Alviso Salt Ponds. At Coyote Creek Riparian Station the old Eucalyptus that the Great Blue Herons nested in fell down in a wind storm, but the birds quickly rebuilt in a willow and currently are feeding nestlings. In addition we are using new methods to age eggs and chicks at certain sites. These techniques are allowing us to determine the exact timing of the breeding cycle much more accurately.

The Forster's Terns are currently sitting on nests and should have nestlings by the time you read this article. This year we are intensively monitoring four colonies for reproductive success. We have marked nests at each of these colonies and have counted the eggs in each nest. In the coming weeks we will return to the colonies to count the chicks that have successfully hatched. These numbers will be plugged into a formula for calculating the reporductive success for each colony. Robin Dakin will then be able to use this information in her study of nest site selection (see below). She will assess the success of nests located in the variety of microhabitats where the terns place their nests.

California Gulls are nesting at four colonies and currently have over 5000 nests. This is slightly higher numbers than have been found in our study area in

area in the past. We have recovered bands from three dead California Gulls. They were all banded at the Knapp Tract in 1985 & 1986. Additionally several color bands have been read from individuals banded between 1984 & 1986.

DIURNAL ATTENDANCE PATTERNS

This year, we inaugurated studies of the diurnal nest attendance patterns of herons, egrets and terns because of an interest in understanding their nest behaviors, and the foraging times of adult herons, egrets and terns. We need to find out if there is a distinct pattern to their nest attendance during the incubation and nestling stages. In the future, we will be better able to plan our visits to nesting colonies so that we can most accurately count the birds, with the least disturbance. These studies will also enable us to correct for past monitoring efforts done at all different times of day at different colonies.

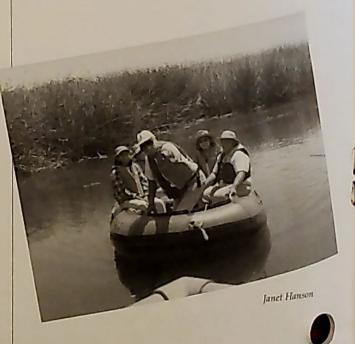
We have had very positive feedback about these studies from our volunteers. They have stated that it provides them with the unique opportunity to really get to know a particular group of individual birds. The observation periods last between 5 and 8 hours. While this is a long day's work the birds provide the entertainment with their sometimes comical behaviors (the word "soap opera" came up more than once). The information we have obtained so far indicates that there is variation in the number of adults at nesting colonies of herons, egrets and terns at different times of the day. Furthermore, these patterns may change during different stages of the reproductive cycle. This preliminary information will be on display at our annual meeting in September. This study will be conducted for one more year in order to obtain more observations of these nesting colonies.

LITTLE BLUE HERON

We have combined the information stored in SFBBO's files with observations reported to American Birds/NAS Field Notes into a summary of the occurrence and breeding records of the Little Blue Heron in Central and Northern California. The initial draft of this manuscript has been reviewed by Daniel Singer, Peter Metropolus, and Adrian Del Nevo. Their response has been very positive and they have provided many helpful suggestions. After a second round of reviews, this paper will be sent to the editor of Western Birds for publication.

INTERNSHIP PROGRAM

We have selected an intern to assist us in these studies this summer. Her name is Kim Briones and she is an Environmental Studies student at San Jose State. Kim brings a tremendous amount of energy and enthusiasm to our organization. In just her first two weeks, she has participated in all three of our principle research programs, and has assisted in many of our tern and gull colony walk-throughs.



In a boat bound for heron and egret surveys in Mallard Slough, from left to right: Kim Briones, Robin Dakin, Lou Young (Board President), Jennifer Parkin, Tom Ryan.

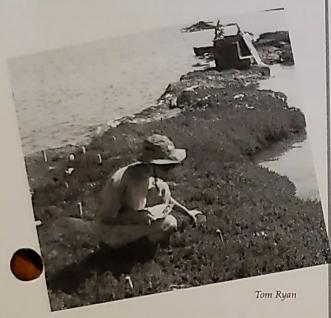
Interested in Volunteering?

Volunteers are still needed to participate in this year's research efforts. If you have time and wish to participate in any of these studies, please call the office at (408) 946 6548. Opportunities include:

DIURNAL ATTENDANCE PAT-TERNS IN FORSTER'S TERNS

See previous page for project description. Saturday, June 21

Project Leader: Tom Ryan Coordinator: Jennifer Parkin



Robin Dakin takes data on a marked Forster's Tern nest.

AVIAN BOTULISM SURVEYS

These weekly boat trips into Mallard Slough start this June and run through November. Avian botulism is a waterfowl disease associated with warm weather and brackish water. Please call to request a schedule. Project Leader: Robin Dakin

FORSTER'S TERN NESTING ISLAND RESEARCH

After fledging, help is needed to take measurements on tern nesting islands. The data will be analyzed for correlations between habitat characteristics and tern reproductive success. Some experience anoeing is helpful but not necessary. The bility to lift 20 pounds or more is essential, as is a willingness to get really dirty. Variable schedule. Project Leader: Robin Dakin (To fulfill requirements for post-graduate work)

NEW EVENT!

SFBBO's First Annual California Fall Challenge

19-28 September 1997

This fall SFBBO will sponsor a fundraising event which will challenge all of California's birding community to show others what their favorite California county has to offer. We have taken the bird-a-thon theme and added a twist. Winners will be determined by who sees the highest percentage of their county's species list and by the largest number of vagrant species seen. The event will take place at the height of California's spectacular fall migration and will become our organization's major fundraising event. We encourage you to begin forming your teams, planning your routes and rounding up sponsors.

New Board Members Sought

The Nominating Committee of the SFBBO Board of Directors seeks persons interested in serving on the Board. Please call the office for more information: 408/946-6548 or email us at sfbbo@aol.com.

Calling All Keys

Are you carrying around extra keys to Observatory facilities or past projects? Please lighten your load and help us reduce duplication costs by returning keys not currently in use. Please mail to SFBBO, P.O. Box 247, Alviso, CA 95002.

Correction

In the last newsletter, in our 1996 annual financial report to the membership, we inaccurately reported the total expenses as \$47,149. The correct amount is \$47,159. We apologize for the error.

Check Out Our New Logo!

Our new SFBBO logo was designed by local graphic designer Ian Smith.



Wish List

Large presentation case, e.g. 25"x31"x3" deep

Bookcases

Office volunteers to organize reference materials

Laptop computer, capable of running Excel 5.0

Surfboards, small kayaks Bench seat cover for our pickup truck

Banding Information Request

Dr. Howard Cogswell has graciously spent many hours of his time and expertise performing an inventory of our banding records and bands on hand. Unfortunately, there are still missing bands and missing records of birds banded. Due to the nature of the omissions, we suspect that some of these are associated with rehabilitated birds. We would greatly appreciate receiving any information you may have, no questions asked. Thanks for any help you may give.

Continued from page 3

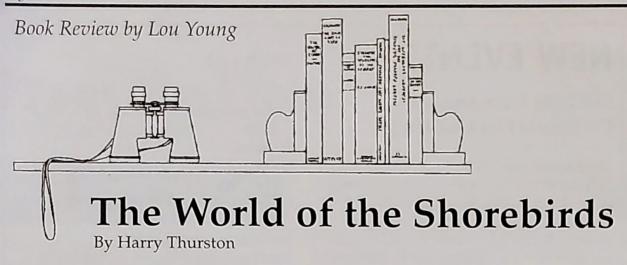
Bair Island's Present And Its Future

In April 1997, the remaining private lands of Bair Island, a 1600 acre section of former tidal marsh, was purchased by the Peninsula Open Space Trust (POST) for eventual addition to the Don Edwards San Francisco Bay National Wildlife Refuge. While our species list during the May survey was disappointing, the future of the ecosystem looks bright for the first time in a century.

This June, Observatory personnel will be surveying inner Bair Island for Burrowing Owls. We look forward to a rebirth of the ecosystem under the management of the Refuge and the restoration of its immense value as bayside wildlife habitat.

This article relied heavily on the report "Bair Island Environmental Inventory", a document produced by Observatory personnel in August 1988, funded by a grant from the Peninsula Open Space Trust.

For more information on how you can help insure the future of Bair Island, contact the Peninsula Open Space Trust, 415/854-7696.



... relevant ... information in a beautiful package.

When I was handed a copy of this book to review, my first impression was "Oh, another 'coffee table' bird book." To my pleased surprise, I found it to be a collection of completely relevant, up-to-date, information in a beautiful package. This is a book that you can place on your coffee table as a starter (and source) for conversations with guests and friends that may generate actions that can make a difference to preserve crucial habitat.

I first leafed through the book and found that the photographs are truly arresting. So much so that my usual leafing speed was reduced to a slow feast of appreciation. The collection is unique for illustrating a range of subjects: nesting, behavior, and migration, and I later found that they are carefully chosen to illustrate the text very closely. At least 6 of the photographs and the beautiful dust jacket photo of an American Avocet with two chicks are credited to SFBBO member David Weintraub. This made a very favorable first impression which was further enhanced when I noticed, in the back of the book, a list of 20 scientific papers and books "for further reading." These include "our" Dr. Howard Cogswell's Water Birds of California (University of California Press, 1977).

I next read the acknowledgments and my first impression began to give way to a suspicion that this is more than just a pretty book. Mr. Thurston acknowledges help from, among others, biologists of the Western Hemisphere Shorebird Reserve Network, and from Argentina, Canada, and Manomet Observatory of Massachusetts. Last but not least, special thanks are given to Dr. Cogswell and Janet Tashjian Hanson, Director of SFBBO. Having discovered this at the start, I still have to try to provide an impartial review! But the amount of research that has gone into the book should be clear. In spite of the word

"World" in the title, the book focuses only on shorebirds of the Americas.

I had a little trouble staying with the first few pages. The author gets a bit personal in his relationship to the birds and some of the language seems a little too romantic for my taste. Very soon, however, he begins to marshal facts and figures about the birds and presents them in an interesting way. The photos are accompanied by panels that explain what is illustrated.

The second and third sections of the book contain the main points of the book. The author clearly explains the reasons why shorebirds are the champion migrators, ounce for ounce, in the animal kingdom. From this he derives strong arguments for the importance of wetlands, and illustrates the arguments with a few clear and attractive maps of our hemisphere. He makes the point most strongly and succinctly that wetlands important as

migration staging and stopover points have been reduced to so few that the birds must concentrate in huge numbers in the remaining areas. This leads to concern that a disaster in one of the few remaining migration stopovers could push one or more species to the brink of extinction.

When I had finished reading the book, I was impressed that the author has included and organized so much information and so many outstanding photos in only 110 pages. Clearly he has accomplished his goal of grabbing the attention of the casual reader to instill awareness of, and concern about, wetlands in the Americas.

Published by Sierra Club Books, 1996 85 2nd Street, 2nd floor, San Francisco, CA 94105. ISBN 0-87156-901-9

Available in all bookstores or call Sierra Club MailOrder 800-935-1056. Retail \$27.50



American Avocet with chicks, by David Weintraub, on the cover of the World of the Shorebirds.

Our thanks to these supporters of the Observatory.....

Memberships

We welcome the following new and returning members of the SFBBO (February, March, April):

Florence Abshire, Janice Anderson, Robert Ball, Walter Berger, Barbara Borthwick, William Bousman, Mary Brezner, Rich Cimino, Nicholas Coiro, Charles and Joan Coston, Kathleen and Derek Currall, Kate Curry, Steve and Robin Dakin, Brigette De Saint Phalle, Joan DeWitt, Joan Frisoli, Quentin Goodrich, Marie Gordon, Lorraine Grassano, Jay and Janet Hanson, Anne Harrington, Roger Harris, Terry Hart Lee, Pat Hauswald, Sue Hunt, Amy Hutzel, June Hymas, Edwin Laak, Phil and Florence LaRiviere, Sue Macias, Julie and Robert MacLean, Virginia McCreary, Nora Monette, Marty Nelson, Bess Nericcio, Ellen Noble, Donna Olsen,

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Our special thanks to:

The Printing Spot, Gilroy MRS Inc., Santa Clara Spectrum Economics for furniture Apple Computer, Inc. (Robin and Steve Dakin) IBM, Inc

Wanted! Artists of Any Skill Level!

Do you make sketches of or photograph our local birds? Do you dream of being published? We can help! We seek line drawings, pencil or ink, and photos, color or b&w, to enhance our newsletter and other publications. Please submit for consideration to Susie Formenti, Newsletter Editor, care of the Observatory. All artwork will be returned.

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The Bird Observatory is located at 1290 Hope St. in Alviso. The office is open weekdays and some weekends, but specific hours vary with our field schedule. Before stopping in, call 408/946-6548 and check when we will be available.

The Board meetings are open to the membership. Call the Observatory office for dates and times.

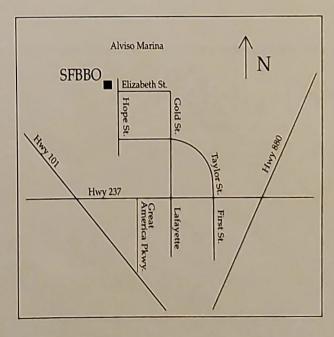
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The San Francisco Bay Bird Observatory is a non-profit (501-C-3) corporation. All memberships and contributions are tax deductible to the extent allowed by law. Annual memberships are as

follows: Patron: \$2,000 Life: \$400 Sustaining: \$200 Contributing: \$100 Associate: \$50 Family: \$35 Individual: \$25 Student/Senior: \$15



In Cooperation with Cargill Salt and PG&E

Disturbance to Nesting Terns Averted

This spring, the breeding waterbirds of the south San Francisco Bay settled into their nesting colonies to begin their annual reproduction cycle. And at the same time, Observatory biologists and volunteers began their work observing and recording data on those colonies. In two instances, our data served to inform corporate land managers of the presence of nesting birds and they agreed to delay work to avoid disturbing the colonies.

In the course of performing levee maintenance, Cargill Salt's dredge, the *Mallard II*, was approaching an island in an Alviso area pond on which Forster's Terns and American Avocets were displaying and establishing nests. Information offered by the Observatory to Cargill resulted in their decision to

defer work near the island until the birds have fledged. In a similar situation, PG&E has delayed work on power towers because the tower bases are on islands in ponds with tern and avocet nesting colonies on them. Our data was relayed to PG&E by biologists at the Don Edwards San Francisco Bay National Wildlife Refuge. This is a positive example of how non-profit organizations, government agencies and private corporations can work together to protect our natural resources.

Forster's Tern colony on Bair Island





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