



December 6, 2010

Eileen Maher
Environmental Services Department
San Diego Unified Port District
PO Box 120488
San Diego, CA 92112-0488



**Light-footed Clapper Rail Propagation and Sweetwater Marsh Nesting Enhancement Project
Progress Report, January 2010 – Document No. 53889**

Dear Ms. Maher:

The Chula Vista Nature Center (Center) is pleased to provide you with this status report for activities supported by funds requested for Light-footed clapper rail captive propagation and artificial nest platform deployment. The following information has been provided by Director of Conservation and Communications Charles Gailband.

Should you have any questions regarding the attached report, please contact Charles Gailband or myself directly.

Thank you for your continued assistance with the Light-footed Clapper Rail Propagation & Sweetwater Marsh Nesting Enhancement Project.

Gratefully,

Julie Schardin
Director of Development
619-409-5902

cc: Eileen Maher

Chula Vista Nature Center

Light-footed Clapper Rail Captive Propagation & Release and Artificial Nest Augmentation

2011 marks the tenth season of captive propagation and release activity for Light-footed clapper rails, *rallus longirostris levipes*. Since its inception, the program has placed more than 270 of California's rarest coastal birds into their native habitat in southern California.

2010 Breeding and Release Activities

The Nature Center housed and exhibited two breeding pairs of clapper rails and one additional single male in 2010. One of the rail pairs successfully reproduced. The single productive pair and breeding rails at SeaWorld San Diego combined for good results. The result of the 2010 breeding and release efforts saw the release of 19 birds into the wild.

Fourteen of these clapper rails were released into Sweetwater Marsh on San Diego Bay.



Fourteen Light-footed clapper rails release into Sweetwater Marsh

The Nature Center continues to be the sole facilitator of the important pre-release behavioral conditioning for all release rails. The pre-release conditioning is a four to six week process which occurs within Sweetwater Marsh and is facilitated by Nature Center staff and volunteers.

Release Location	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Sum
Point Mugu	7	11	20	12	17	3	5	27	5	-	107
Seal Beach NWR	-	6	-	5	-	-	-	13	5	-	29
Sweetwater Marsh	-	4	-	-	11	-	-	6	-	14	35
Kendall-Frost	-	-	5	-	-	-	-	-	7	-	12
Batiquitos Lagoon	-	-	-	8	8	-	-	-	-	-	16
San Elijo Lagoon	-	-	-	8	-	5	4	-	16	-	33
Agua Hedionda Lagoon	-	-	-	5	-	-	-	-	-	-	5
Los Penasquitos Lagoon	-	-	-	4	-	-	4	-	9	-	17
Carpinteria Marsh	-	-	-	2	-	-	-	-	-	-	2
SD River Preserve	-	-	-	-	5	-	5	-	-	5	15
Total	7	21	25	44	41	8	18	46	42	19	271

Table 1. Number of Captive-reared Light-footed Clapper Rails Released, 2001 – 2010.

(Zemba, 2010)

2011 Breeding Update

There are currently nine rail pairs set-up for captive breeding; three pairs with the Nature Center, two pairs at SeaWorld, and four pairs at the San Diego Zoo Safari Park. This represents the largest captive breeding flock since efforts were initiated in 1998. The increased breeding pool was established to allow continuity within the program and to facilitate rotation and/or the replacing of more productive breeding birds in an effort to properly manage the bloodlines of release birds.

To date, two pairs at the Nature Center have produced two clutches of chicks. One of the pairs has a third clutch of eggs. San Diego Zoo Safari Park has a pair of rails that have produced a single clutch of chicks that are currently in prerelease proving enclosures at the Nature Center.

Chula Vista Nature Center

Light-footed Clapper Rail Captive Propagation & Release and Artificial Nest Augmentation

A pair of rails at SeaWorld has produced a clutch of chicks and a second clutch of eggs. The significant portion of the potential breeding season is still ahead of us. It is common for captive rails to breed into the later part of July. The Nature Center and partners anticipate the first rail release for 2011 should occur in mid to late July. Release locations for the year will likely be split between the northern San Diego Lagoons and Seal Beach National Wildlife Refuge.

Wild Rail Nesting in Sweetwater Marsh Complex 2010 and 2011

2010 spring surveys in Sweetwater Marsh and surrounding areas revealed a high of eight clapper rail pairs and several unpaired birds. This is a highest recorded number of pairs since 1986.

Despite the significant number of rails released in to the Sweetwater Marsh in 2010, the 2011 spring survey accounted for fewer pairs than in 2010. Observations in the Sweetwater Marsh for Clapper Rail breeding activity have focused on four dates. Seven observers have participated with field efforts totaling approximately 37 field-hours. The 2011 breeding population for the Sweetwater Marsh complex is estimated to be six pairs, including two that are inland on the Sweetwater River near 2nd Avenue. Three active nests were. One nest had hatched and the adults were nearby defending young. Two pairs detected north the Nature Center access road in the Vener Pond Marsh area. One pair moved onto the island near the Nature Center volunteer parking area. There was also an unmated, advertising male detected in the Main Marsh just west of the Vener Pond Area. No detections were made in the Main Marsh further west toward the D St Fill where a pair bred in 2010.

Location	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Paradise Creek	1	2	3	1	1	0	0	0	0	0	0	0	1	0	0	1
Sweetwater	4	5	7	6	14	3	9	5	5	5	2	4	4	3	7	7
E Street Marsh	3	1	3	3	2	2	2	0	1	0	0	1	1	1	0	2
F Street Marsh	-	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
COMPLEX TOTAL	8	9	14	10	18	5	11	5	6	5	2	5	6	4	7	10

Table 2. Rail Population in Sweetwater Marsh Complex, 1980 - 1994.

(Zemba, 2010)

Location	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Paradise Creek	2	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-
Sweetwater	8	3	4	3	2	3	3	1	3	1	4	4	3	5	6	*2
E Street Marsh	1	1	1	2	2	0	1	1	0	0	2	1	0	0	0	4
F Street Marsh	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-
COMPLEX TOTAL	11	4	6	5	4	3	4	2	3	1	6	5	3	5	6	6

Table 3. Rail Population in Sweetwater Marsh Complex, 1996 - 2011. *

Nests are inland, not in traditional marsh

(Zemba, 2010)

Artificial Nest Platform Deployment and Nest Monitoring

As of spring 2011, 14 artificial nest platforms are deployed into Sweetwater Marsh. The target goal of 15 was met but two were pulled for repair after vandalism/repurposing by homeless persons. The vandalized structures will be re-deployed for next season.

None of the artificial nest structures have been utilized for egg incubation. However, several of the structures are near known wild rail pairs. Given the state of cord grass and other vegetation in the areas, the structures could serve as brood nests.

Chula Vista Nature Center

Light-footed Clapper Rail Captive Propagation & Release and Artificial Nest Augmentation

Educational Endeavors

As the breeding success continues, the program participant's educational efforts expand as well. Chula Vista Nature Center, SeaWorld San Diego, and San Diego Zoo Safari Park continue to contribute to the breeding efforts of the clapper rail.

Additionally, both have included new educational components that highlight clapper rail natural history and conservation efforts.

- **SeaWorld San Diego** installed interpretive signage to educate guests about the clapper rails and the importance of coastal wetlands. The Education Department includes the clapper rail breeding enclosures as part of their behind-the-scenes tours and day camp programs
- **San Diego Zoo Safari Park** created a substantial conservation exhibit that includes a section on clapper rails. The rail portion includes an interactive component that allows guests to use a hand-held radio telemetry receiver to find a family of clapper rail, life-sized sculptures in a simulated tidal creek.



Rail interpretive sign at SeaWorld

The Light-footed clapper rail continues to be the Nature Center's marquis symbol. Nature

Center guests are currently able to view three different pairs of clapper rails in two distinct areas. In addition housing two pairs of breeding rails in *Clapper Rail Creek*, an additional pair has been established in the popular *Turtle Lagoon* exhibit. The endangered Eastern Pacific Green sea turtle and Light-footed clapper rails are the first things guests see as they begin their visit at the Nature Center. Attendance for the Nature Center continues to grow steadily; it is up 28% compared to same time last year.



Rail nest model/play structure at CVNC

A new educational piece featuring clapper rails, *Chula Vista Nature Center Kid's Guide* is in final editing and will go to print soon.

This interactive activity booklet will be available to educators, students, and guests to assist in enhancing the learning process.

Online Education

A newer and expanding form of education and outreach for the Nature Center is in the online platforms. Images and content chronicling the successes of the clapper rail efforts are regularly shared.

Facebook has grown to over 2,000 fans in 2011.

(<https://www.facebook.com/cvnaturecenter>)

Twitter is a fairly new platform for the Nature Center; there are 251 people following the feed.

(<http://twitter.com/#search?q=CVNatureCenter>)

Chula Vista Nature Center

Light-footed Clapper Rail Captive Propagation & Release and Artificial Nest Augmentation

Tumbler is hosting a blog series for clapper rail and animal related content.

(<http://cvnc.tumblr.com>)

The Nature Center Website has been improved and now has a Spanish language version. The live *Rail Cam* still broadcasts a real-time video feed from a pair of clapper rails.

(<http://www.chulavistanaturecenter.org/>)

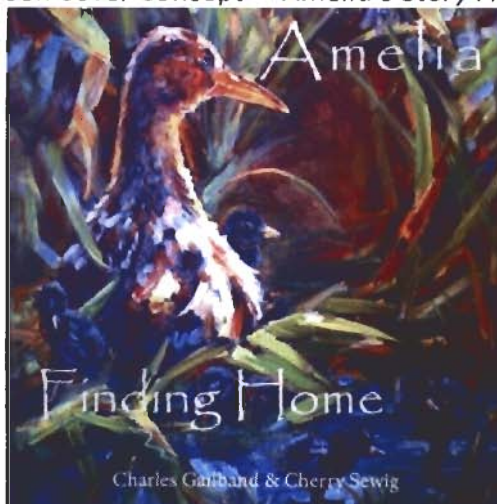


Rail family as seen on CVNC rail web cam

Other Notable Accomplishments in 2010-2011

- A Clapper rail that hatched at the Chula Vista Nature Center, Amelia, and later released in Mugu Lagoon made an unlikely 160 mile journey and returned the Nature Center. This trek captured the hearts of many and received considerable media attention. The female rail, named Amelia by the San Diego Union Tribune, has been added to the breeding pool at the Center. Her story was covered by local TV stations on three different occasions, made the San Diego Union Tribune for two separate stories, and was featured in multiple blog journals. A children's book that chronicles Amelia's story while interpreting the natural history of clapper rails and wetlands is being developed. (See Attachments: *A year later, rare bird makes 160-mile trek home.* & *Rare bird sets up housekeeping in Calif.*)
- The web camera that features a breeding pair of rails at the Center remains available to anyone with an internet connection access to view the day to day life of a mating pair of clapper rails.
- Lead Biologist, Richard Zembal, was recognized as a *Conservation Hero 2010*, by the United States Fish & Wildlife Service for his work with Light-footed clapper rails. (See Attachment: *Man honored for work to save endangered bird*)
- Michael Mace, San Diego Zoo Safari Park, was recognized as *Conservation Hero 2011* for his contribution to the conservation of endangered species, including Light-footed clapper rails. (See Attachment: *Conservationist lauded for saving endangered species*)

Children's Book Cover Concept – Amelia's Story Finding Home



Front Cover

Chula Vista Nature Center

Light-footed Clapper Rail Captive Propagation & Release and Artificial Nest Augmentation



Rail chick hatched from a wild collected egg for future breeding stock - 2011.



Amelia. The captive hatched, wandering rail, and her first chicks - 2011

Conclusion

This year marks the tenth anniversary of the first successful captive hatch and release of Light-footed clapper rails. It is very likely that the program will release the 300th clapper rail into the wild in the summer of 2011. Recovery efforts over the past decade have had a positive impact on the southern California population. "A total of 376 pairs of Light-footed Clapper Rails exhibited breeding behavior in 19 marshes in 2010. This is the third highest count on record" (Zemba, 2010).

The reintroduction efforts and their results are encouraging for the future of rails in California. These and other activities favor the future of this highly endangered marsh resident for the San Diego sub-population. Habitat improvements in south San Diego Bay combined with ongoing public awareness efforts combined with continued reintroduction activities should all contribute to a larger and healthier rail population in years to come.

Citations

Zemba, R., S.M. Hoffman, J. Konecny, L. Conrad, C. Gailband, and M. Mace. 2010. Light-footed Clapper Rail Management, Study, and Propagation in California, 2009.

A year later, rare bird makes 160-mile trek home

By Mike Lee, UNION-TRIBUNE

Lily Leung, UNION-TRIBUNE

Originally published December 7, 2010 at noon, updated December 8, 2010 at 10:04 a.m.

It turns out that you can go home again and might even find true love — at least if you're a rare coastal bird from the Chula Vista Nature Center.

More than a year ago, conservationists released a female light-footed clapper rail from San Diego Bay at a lagoon 160 miles north in Ventura County. She has found her way back despite the long odds, setting a distance record.

Rails aren't known to be strong fliers; they typically cover just several hundred yards at a time. They have little suitable habitat left in highly developed Southern California, so there are few attractive stops.

But the unnamed marsh bird managed to weather storms, predators and other obstacles on her return to sender — a feat that has scientists baffled because clapper rails are considered nonmigratory.

"Biologically, I can't explain it," said Brian Collins, a biologist for the U.S. Fish and Wildlife Service in San Diego. "It's amazing that this bird returned from such distance and it's heartwarming to see that. But at the same time, as a biologist who is working on this captive breeding program we don't necessarily want them to come home to Mommy"

By spring, the homebound clapper rail likely will breed with a male that she immediately took to upon her return. She could lay eggs between March and May.

"They are bonding quite well," said Charles Gailband, who supervises birds at the nature center.

How does he know that?

"They're duetting, the vocalization of a male and female pair," Gailband said. "They do it when they are an item, a pair."

Clapper rails are not monogamous, though data from the breeding program suggest they commonly mate with the same partner. Gailband said the female bird will stay at the nature center because her homing behavior would expose her to predators in the wild.

About a month ago, employees at the center noticed the female clapper rail hanging out with a captive rail through the wire of an exhibit at the wildlife refuge.

"When I saw her, I had questions, and that just created more questions. I became obsessed with it," Gailband said.

He captured it, and judging by its identification band, concluded it was a bird released more than a year earlier at the Mugu Lagoon in Ventura.



Photo Courtesy of Charles Gailband, Chula Vista Nature Center
Pictured is a female clapper rail that journeyed 160 miles to return to her birthplace at the Chula Vista Nature Center.



Spin Your Electric Meter Backward
10 Days and Low Monthly Payments
Calculate Your Savings
(877) 808-7652
SolarCity

U.S. News

Rare bird sets up housekeeping in Calif.

Published: April 15, 2011 at 3:49 PM

SAN DIEGO, April 15 (UPI) -- A bird named for Amelia Earhart has hatched at least six chicks at a nature center near San Diego after a 160-mile trip from another county, officials say.

Amelia the light-footed clapper rail returned to the Chula Vista Nature Center late last year from a lagoon in Ventura County, 160 miles to the north, The San Diego Union Tribune reported Thursday.

ails are not considered strong flyers and the bird's return to Chula Vista made her something of a celebrity in the wildlife research community.

Amelia quickly joined up with a male bird named Putnam, after the aviatrix's publisher and husband George Putnam, and laid eight eggs, successfully hatching six of them.

"We don't always have such great success as quickly with new pairs," Charles Gailband, conservation director at the nature center, said. "She is going to be with us for a long time. She has proved her worth."

Brown with long orange beaks, clapper rails stand about 14 inches tall and were once common along Southern California's coastline.

Their numbers fell as marshes up and down the coast gave way to development and the species was listed as endangered in 1970.

Amelia is part of a long-term project at the nature center to repopulate the birds across Southern California, Gailband said.

© 2011 United Press International, Inc. All Rights Reserved. Any reproduction, republication, redistribution and/or modification of any UPI content is expressly prohibited without UPI's prior written consent.

Read more: http://www.upi.com/Top_News/US/2011/04/15/Rare-bird-sets-up-housekeeping-in-Calif/UPI-51601302896940/#ixzz1Jnghzi8C

SIGN ON
SAN DIEGO**NEWS**

Man honored for work to save endangered bird

By [Mike Lee](#)

12:04 a.m., May 11, 2010

Richard Zembal, a veteran advocate for the endangered light-footed [clapper rail in San Diego County](#), has been named one of three Endangered Species Recovery Champions in [California by the U.S. Fish and Wildlife Service](#).

The [San Diego National Wildlife Refuge Complex](#) had nominated Zembal because he is considered the “heart and soul” of initiatives to save the marsh [bird](#), the group said in a statement.

A celebration of Zembal’s contributions is planned for Wednesday, May 12, at the [Chula Vista Nature Center](#), where the first clapper rails were born in captivity nine years ago.

During his career with the Fish and Wildlife Service and the Orange County Water District, Zembal brought together numerous partners for clapper rail conservation efforts, including the Navy and the Unified [Port of San Diego](#).

He also helped to create a study and management team in 1979 to maintain the health and genetic diversity of the bird.

Zembal, currently the water agency’s natural resources director, lives in [Mission Viejo](#).

SIGN ON

SAN DIEGO

Conservationist lauded for saving species

By Mary Kenney

2:09 p.m., May 20, 2011



Michael Mace has been a force behind bird conservation efforts in the Southwest for decades. — San Diego Zoo

As part of Friday's observation of Endangered Species Day, the San Diego Zoo Safari Park's Michael Mace was honored by the U.S. Fish and Wildlife Service as a "recovery champion."

Mace, the park's curator of birds, was one of three award recipients from the service's Southwest region. He was recognized for his efforts to boost the populations of the California condor and the light-footed clapper rail.

Sandy Vissman, of the U.S. Fish and Wildlife Service in Carlsbad, also won a recovery champion award for her work with the San Clemente Island loggerhead shrike. The third award went to an Indian tribe in Nevada.

Endangered Species Day, which began in 2006, is observed by the Fish and Wildlife Service and others to draw attention to the plight of imperiled plants and animals as well as successes helping them to recover.

Mace began advocating for the capture and breeding of the California condors after the birds' population went into a steep decline in the late 1970s. Today, there are 192 California condors thriving in the wild, largely due to the effort of Mace and his colleagues.

He has also helped to conserve the endangered light-footed clapper rail. Working with the San Diego Zoo, SeaWorld, Chula Vista Nature Center and the Fish and Wildlife Service, Mace contributed to the steady growth of the clapper rail population from 163 pairs in 1989 to 443 pairs in 2007.

Q: Why did you advocate for the last condors to be captured and bred in captivity?

A: The California condor population started to plummet significantly in the late '70s and early '80s, and at one point the population crashed to just 22 birds left in the world. That was an alarming, escalated potential extinction of the species. So it was decided after great debate to at least safeguard the remaining birds and bring them into the San Diego Zoo Safari Park and (the zoo in) Los Angeles until some of the issues could be resolved.

Q: What risks or challenges did that entail?

A: It's interesting; some of the prominent challenges during that crash are still present today. One of those is lead from spent ammunition. Condors are a scavenger species, so they clean up our environment by consuming animals that have died. Some of those animals are the result of hunting activities, but ... issue is not about the activity of recreational hunting. The issue is just the fact that condors scavenge and pick up this lead accidentally. So that's detrimental to their health, but it's also detrimental to people's health, too, if they eat some of that game that has those lead fragments in it.

Q: What was the most important breakthrough in the condor recovery efforts?

A: There have been significant milestones. One milestone was when we brought all the birds in to save them from extinction while issues in the environment were being resolved. Another milestone was the fact that we were actually able to work with the species and produce offspring that ultimately were released into the wild. And one of the great milestones we have to this day is we're coming up on almost 200 condors flying free in the wild. And now some of those birds are raising their own offspring in historic sites where their ancestors have (reproduced).

Q: What do you predict for the future of the California condor in California, the United States and Mexico?

A: We have overcome some of the challenges for the species now. But as we move forward with that, the success will exponentially grow. So what we're looking for ultimately is a population of condors in the wild that are thriving on their own without intervention or additional care. That's the ultimate goal.

Q: Clapper rails and other endangered species often get a lot less attention than condors and other iconic species. Why do you spend your time and energy on them as well?

A: It's important that we take care of an ecosystem and all of the plants and animals and organisms that live in that ecosystem. It's a very delicate balance in the relationships of those animals and plants. And if you lose a species out of that environment, it will affect the organisms that are dependent on it on either side of that food chain.

Q: What do you think San Diego county residents should know about how they can help protect species from becoming endangered?

A: Today is Endangered Species Day. But there are 364 days of the year that are also endangered species days. So it's just important that people are aware that these environments we're talking about, we live in the same environments, and if we take care of the animals and plants that live in that area, we also benefit.

Q: Do you have any tips for residents who would like to get involved in conservation efforts?

A: There are a lot of great initiatives at the city level and the county level with regards to public conservation. It can be as simple as putting certain types of plants in your yard that the animals that live in the neighborhood might feed from — hummingbirds, finches, that sort of thing. So that creates these wildlife corridors, so as the animals move around, they have places where they can stop over to nest, feed or live.

Reach Mary Kenney at mary.kenney@uniontrib.com or 619-293-2203. Follow her on Twitter @MarySKenney and on Facebook.