



Dedicated to the preservation, education and history of our incredible national treasure - Midway Atoll

SPRING BABIES AT MIDWAY

by Barry Christenson, Refuge Manager



"The duck brood shot was taken in the water catchment basin. Water levels were low due to the drought but recent rainfall has made the vegetation rebound and wildlife and humans happy. We have a very good supply of water in the tanks."

The month of May finds all well on Midway as we head towards anticipated fledging of this year's crop of Laysan and Black-footed albatross chicks. With a record number of nests, we are hoping for a record crop of fledglings. As the warmer summer weather seems ahead of schedule and our very dry conditions continue, however, nature may be working against our birds. We all are enjoying the beautiful sunny weather, but we are really wishing for a refreshing and invigorating rain.

The Laysan ducks continue to do amazingly well. So far this spring we have 12 nests: 1 on Eastern and 11 on Sand. Nine hens are still incubating and three have hatched; of those three we have two broods of 6 and 4 each. The third brood was only a single duckling that was lost after two days. Our total Laysan duck population stands at 51 adults with lots more growth yet this year we hope.

As always, there are a tremendous amount of things happening. Of course our volunteers are hard at work completing albatross productivity plots and helping with a new study of the possible impact of contaminants in birds along west beach. Their good work with native plant reestablishment continues with two locations on Sand Island and two areas on Eastern. Despite the dry conditions, the grasses are doing very well.

Much of my time is spent planning various aspects of the many construction projects that are planned for this summer and the next 3 years. This year we will complete the electrical grid upgrade which we started last fall. New switchgear (the electrical components that route the power from the generator to the various lines) will be installed as will new underground feeder lines to replace most of the old, above ground lines. Some minor improvements to the new water system installed last year are also scheduled. The much anticipated barge bringing all the construction equipment will also bring our new fire truck, the new dozer, and various other items as we continually work to upgrade and improve our infrastructure and equipment.

This is the time of year when driving or riding a bike becomes a joy or a problem – depending on your attitude and how quickly you are trying to go somewhere. The chicks are all over the roads throughout town and it becomes a challenge to go from point A to point B. I was thinking the other day – what a wonderful commuting problem to have!! That is just one of the many unique things that are part of living and working here. I personally take time each day to watch a white tern pair flying high in the blue sky or an albatross feeding its young or tropic birds doing a courtship flight: there is so much here to enjoy and marvel.

We continue to plan for a restart of a visitor program in 2007. Progress has been slow on my part as so many things demand parts of my time. But we will succeed and we all look forward to welcoming you and others who desire to visit Midway. In the meantime until I can thank you in person, I sincerely appreciate the assistance given to our programs by you and the other Friends of Midway Atoll.



Photo shows volunteers Ted and Betty DuVarney riding through and past chicks on way to the Midway Mall.

KAUA'I GETS SOME CHICKS

By The Garden Island Newspaper Kauai

Posted: Wednesday, Apr 05, 2006 - 03:07:16 pm HST

Scientists are keeping keen eyes on some of the island's most-recent visitors, as how they grow here may hold the key to the continued existence of some of their cousins nearly 4,000 miles away.

April 4th, 10 Laysan albatross chicks arrived here on a private plane from Midway Atoll.

How they grow in Kilauea will be studied to see if some of the knowledge can be imported to Japan to be used in attempts to set up new nesting colonies for the nearly-extinct short-tailed albatross, also known as golden gooneys and known to breed only in Japan. The 10 Laysan albatrosses, around one month old, arrived at Lihue Airport yesterday morning, and were transported by federal ground vehicles to their new homes in Kilauea after making the 1,000-mile flight from Midway Atoll and gaining medical clearances.

The new arrivals are part of a pilot study to gain more experience in the human handling and rearing of albatross chicks, U.S. Fish and Wildlife officials said in a press release.

These down-covered chicks bring hope to the survival of another albatross species only known to breed in Japan. The short-tailed albatross, also known as the golden gooney because of the golden-yellow mane and nape the mature adult birds develop, is on the brink of extinction.



Laysan albatross

Knowledge gained from this pilot project will help researchers in Japan relocate birds to establish new breeding colonies, which will help in the recovery of the species.

By translocating chicks to a new, safer colony site in Japan, researchers hope to "jump start" the process of new-colony formation, thus speeding up the recovery process.

The preliminary step of trans-locating Laysan albatross chicks (a relatively abundant species) will provide the knowledge needed in the handling and rearing of the albatross chicks, in order to minimize risks to the endangered short-tailed albatross during future translocations.

"This unique pilot project allows us to share our previous knowledge and experience with our Japanese counterparts across the Pacific while also expanding that knowledge and experience through cooperative efforts to recover this endangered seabird," said Barry Stieglitz, project leader for the Hawaiian and Pacific Islands National Wildlife Refuge Complex.

The chicks were gently captured by hand by refuge staff members on Sand Island, one of three islands that make up the Midway Atoll National Wildlife Refuge.

The young seabirds, placed in individual shipping containers, were subjects of tests for avian influenza, external and internal parasites, and overall health, by U.S. Geological Survey veterinarian Dr. Thierry Work, upon their arrival at Lihue Airport yesterday.

"The rearing site is within a portion of the refuge previously closed to public entry to protect and minimize disturbance to wildlife," said Brenda Zaun, biologist at the Kilauea Point National Wildlife Refuge. "It is a beautiful area for albatross, on a protected ridge overlooking the ocean with tradewinds needed for their first flight in a few months," said Zaun.

"Chicks will be fed an appropriate diet, and their weights regularly monitored until they fledge sometime in July."

Zaun will work closely with Dr. Tomohiro Deguchi, an expert in avian husbandry, and graduate research assistant Tomoko Harada of the Yamashina Institute of Ornithology, who will be responsible for the daily feeding, rearing activities, and data collection during the pilot study.

Other non-federal partners involved in the study include experts from Toho University, Japan, and Linda Elliot of the Hawaii Wildlife Center. The short-tailed albatross (*Phoebastria albatrus*) at one time was possibly the most abundant of the three North Pacific albatross species.

Millions of these birds were harvested by feather-hunters prior to and following the turn of the 20th century, resulting in the drastic decline of the species by the mid-20th century.

Fewer than 2,000 birds are known to exist today.

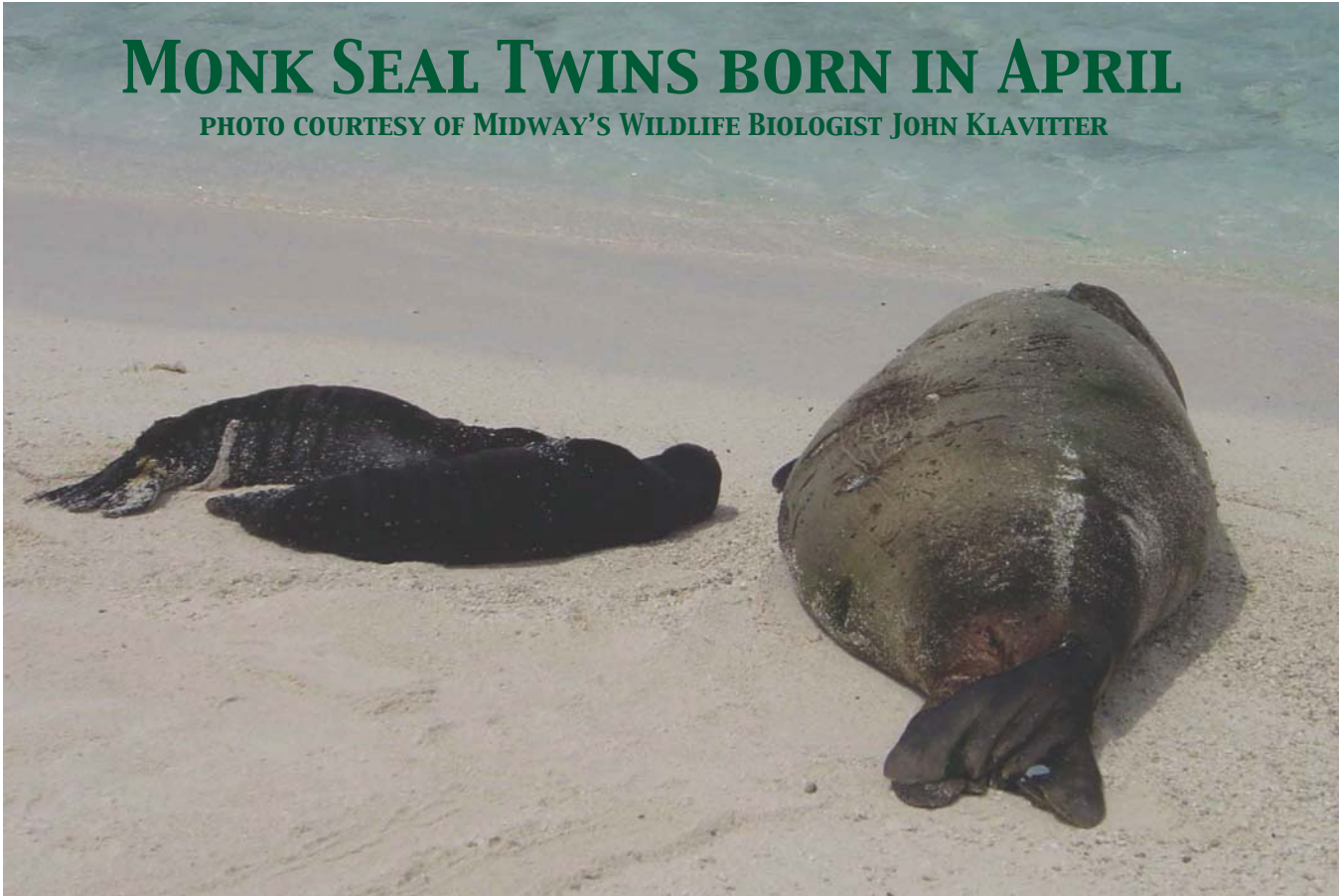
The species is known to breed on only two remote sites (Torishima and Senkaku) in the western Pacific. Torishima Island, where 80 percent to 85 percent of the species breed, is home also to an active volcano, and the natural colony site on the island is susceptible to mud-slides and erosion.

An artificial colony site has been established in a less-erosive area on the island. The other breeding site in the Senkaku Islands, located to the southwest of Torishima, is subject to political

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MONK SEAL TWINS BORN IN APRIL

PHOTO COURTESY OF MIDWAY'S WILDLIFE BIOLOGIST JOHN KLAVITTER



*Hawaiian Monk Seal Facts -excerpts from
www.fws.gov/midway/wildlife/seal.html website. 5-23-06
(Monachus schauinslandi)*

“Description

Adults dark gray to brown above, light gray to yellow below. Adult body length: 7-8 ft. Weight: 375-500 lbs (167-222 kgs). Adult females generally larger than males. Pups jet black and weighs 25-30 lbs (11-14 kgs) at birth. 5-6 week nursing period. Coat is lost through molting once per year, usually between April and December. Molting takes approximately 7-10 days. Seals remain on shore during most of the molting period.

Distribution

Endemic to Hawaiian archipelago and found almost exclusively in Northwestern Hawaiian Islands (Nihoa Island to Kure Atoll). Occasional sightings reported from Main Hawaiian Islands (Big Island of Hawaii to Niihau). In 1998, about 1200-1300 in total population. About 65 individuals reside at Midway Atoll. Most seals remain at their birth atoll for life and there is little permanent inter-atoll movement. About 22 monk seals visit Midway intermittantly from Pearl and Hermes, and Kure Atoll. Monk seal population currently being studied by National Marine Fisheries Service researchers.

Feeding

Feeds on lobster, eels, small octopus, and reef fishes, usually feeds at depths of less than 50 m with a maximum of 500 m. Resting takes place on isolated and undisturbed beaches.

Breeding

Sexually mature at age 4-7 years. Females begin breeding at 5-6 years. Males bite the back of females while mating and can rip skin and blubber. Mating takes place in the water. Pregnant females will not give birth on beaches where there is much human activity. Most pups born between February and July. Fourteen and twelve pups were born on Midway in 2000 and 2001, respectively. Most sexually mature females give birth every other year.

A single seal pup is most often born between February and July on undisturbed beaches. Pups are continually attended by the mother for 4-6 weeks. Seal milk is very rich and a pup may triple in weight in six weeks, with the mother losing as much as 300 lbs (133 kilos).”



Elise Christenson (Refuge manager's wife) and volunteer Marsha Sorensen riding bikes near the clinic.

GRANT AWARDED TO HELP IN THE FIGHT AGAINST INVASIVE SPECIES

by Christy Finlayson

The Friends of Midway Atoll National Wildlife Refuge (FOMA) has been awarded a \$24,700 grant from the National Fish and Wildlife Foundation's Pulling Together Initiative grant program. These funds will support a collaborative effort between the USFWS, FOMA, Biological Conservation Assistance Program (BCAP), and volunteers to control *Verbesina encelioides*, or golden crownbeard, on Midway Atoll. Golden crownbeard is an annual flowering shrub with yellow flower heads that resemble sunflowers. On Midway, golden crownbeard is a widespread, aggressive weed that grows in dense, monotypic stands of up to 8 feet in height. Midway's soils are sandy and climate ideal for high germination and growth rates; it is estimated that over 60% of Midway's 1600 acres has *some* golden crownbeard growth.



Golden crownbeard Photo credit: Forest and Kim Starr (USGS)

Dense stands of golden crownbeard on Midway complicate native plant restoration and reduce nesting habitat available for birds. Hand-pulling or mowing has proved to be labor-intensive and ineffective in the long-term, and may actually continue the cycle of soil disturbance favorable to golden crownbeard. Herbicide treatment is effective in eliminating plants, but does not prevent regeneration from the seed bank. Managers at Midway have observed that plots with dense stands of both non-native (Bermuda grass, Buffalo grass, and sweet alyssum) and native species (morning glory, puncture vine, and Naupaka) appear to be resistant to invasion by golden crownbeard. This suggests that an integrated approach, using mechanical means (mowing), herbicide, native plant propagation and out-plantings, and removal of competing weed sprouts, may prove to be an effective means to control golden crownbeard.

The goals of this project are to remove golden crownbeard from areas of critical habitat at Midway Atoll and restore a native ecosystem which will provide immediate benefits for 17 species of nesting seabirds, for the endangered Laysan Duck, and possibly towards the breeding of the endangered Short-tailed albatross. Long-term control and prevention is also needed because this plant spreads rapidly and limits seabird nesting and native plant recruitment. Preventing the re-establishment of golden crownbeard and other potentially invasive species must also include the involvement and education of the public; thus, an educational brochure and teaching lesson will be developed for use on the refuge and beyond in educating the public in general about invasive species. Without a control and education program, golden crownbeard and other invasive species may spread to other Northwestern Hawaiian Islands and disrupt additional native ecosystems.

Volunteers will be selected from the local community and United States mainland based on their ability to contribute to the task, their interest in gaining experience in invasives management, and their interests in sharing their experiences within the communities in which they live. Upon the application to serve as volunteers, potential candidates will be asked how they can share their experiences on Midway in a way that will educate others about Midway and about invasive species in

general. Their responses will be a major factor in the selection of volunteers.

The project was developed by University of Maine Biologist, Christy Finlayson, with input from Midway's Wildlife Biologist, John Klavitter, and Refuge Manager, Barry Christenson. Friends of Midway National Wildlife Refuge (FOMA) will partner with Biological Conservation Assistance Program (BCAP) and the United States Fish and Wildlife Service (FWS) on Midway to implement the proposed project.

BCAP (also a non-profit, tax-exempt, 501(c)(3) public charity) is an organization of experienced, professional scientists dedicated to supporting the conservation of ecosystems, habitats, and species of concern by partnering with local communities and organizations to fill crucial gaps. Working together with project managers, BCAP determines where a project's most crucial needs can be satisfied by BCAP expertise and assistance, delivering support in the form of volunteers, funding and/or services such as, the conducting of field surveys, sample collection, habitat characterization, data input, analysis, and interpretation, report-writing, education and training, and facility improvement.

Project Outline:

***Verbesina encelioides* (Golden Crownbeard, Family: Asteraceae) on Midway Atoll: Integrated Management in Critical Wildlife Habitat Coupled with Public Education**

This project will be implemented in areas that have been designated as critical habitat for native wildlife and thus a priority for the removal of golden crownbeard. The removal effort (180 acres, @ ~36 acres/yr) will be conducted in stages that correspond to the cycles of golden crownbeard and bird activity.

Phase 1: Mowing of golden crownbeard to a height of 4 cm. (This phase will be conducted by USFWS staff.) From August to November, 2006, a riding lawn mower will be used to mow golden crownbeard to a height of 4 cm or less, a height that has shown to be short enough to prevent rapid regeneration of the plants. Albatross are present at Midway from mid-November until mid-August each year; for this reason, mowing must occur when albatross are absent.

Phase 2: Application of herbicide on newly emerging golden crownbeard. (Activities will be conducted by USFWS staff.) Golden crownbeard populations go through an incomplete die-off in December and January, and then sprout en masse in March. From December, 2006, to March, 2007, herbicide (Rodeo), which has been successfully used in the control of golden crownbeard and determined not to be detrimental to wildlife or human health in this setting, will be applied to newly emerging plants.

Phase 3: Hand-pulling of golden crownbeard and replacement with native species: From mid-March to mid-April, 2007, golden crownbeard will be pulled by hand and native plants will be out planted where the removal of golden crownbeard has left disturbed soils that if left alone would be prime areas of re-establishment for golden crownbeard.

- In an intensive effort by 10 volunteers, golden crownbeard that has emerged in the critical habitat areas will be pulled by hand.
- Areas where golden crownbeard has been removed will be replanted with native species.

Phase 4: Creation and Dissemination of Report and Educational Products:

By September 15th, 2007, at the absolute latest,

- A summary report will be produced, submitted for publication, and made available through USFWS and online at the FOMA website.
- An educational brochure on golden crownbeard will be developed, printed, and made available to interpreters and visitors to Midway and made available online through MANWR and FOMA. The brochure will describe the life history of golden crownbeard, its spread, the issues regarding its presence on Midway, and what can be done to prevent its spread. The brochure will be made available to interpreters and visitors before their arrival on Midway, when this information will be the most useful to golden crownbeard management on Midway.
- A teaching lesson using the problem of golden crownbeard on Midway as a case study will be developed and made available through MANWR and FOMA websites and be distributed online in electronic educational listings. The teaching lesson will use Midway's golden crownbeard problem as a case study.
- Volunteers will summarize their experiences and distribute this summary and the project's educational products in their communities.

Phase 5: Maintenance, Monitoring, and Moving On:

After mid-April, 2007,

- Native plants will be watered.

- Priority areas will be monitored for new golden crownbeard growth.
- Control of golden crownbeard will be initiated in secondary management areas.

It is expected that this project will be repeated annually for at least 5 years or until golden crownbeard is manageable or eradicated, after which monitoring for re-establishment will be regularly conducted.

For more information, please contact Christy Finlayson at christy.finlayson@umit.maine.edu.

National Fish and Wildlife Foundation

"The National Fish and Wildlife Foundation is a private, non-profit, 501(c)(3) tax-exempt organization, established by Congress in 1984 and dedicated to the conservation of fish, wildlife, and plants, and the habitat on which they depend. Our goals are to promote healthy populations of fish, wildlife, and plants by generating new commerce for conservation. The Foundation meets these goals by creating partnerships between the public and private sectors and strategically invests in conservation and sustainable use of natural resources."

(National Fish and Wildlife Foundation, Copyright 2006, Website: www.NFWF.org)

Pulling Together Initiative

Public-Private Partnerships to Manage Invasive Weeds

"The Pulling Together Initiative (PTI) provides support on a competitive basis for the formation of local Weed Management Area (WMA) partnerships. These partnerships engage federal resource agencies, state and local governments, private landowners, and other interested parties in developing long-term weed management projects within the scope of an integrated pest management strategy. The goals of PTI are:

- *To prevent, manage, or eradicate invasive and noxious plants through a coordinated program of public/private partnerships.*
- *To increase public awareness of the adverse impacts*

of invasive and noxious plants.

PTI grants are financed by funds from federal agencies, which must be matched by cash or in-kind contributions from state, local, and private partners on at least a 1:1 basis."

(National Fish and Wildlife Foundation, Copyright 2006, Website: www.nfwf.org/programs/pti.cfm)



"Golden crownbeard growth habit. Kim Starr poses with three Laysan albatross. Photo credit: Forest and Kim Starr (USGS)"

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ADVOCACY - Molly Krival reported at the last board conference meeting, that Ding Darling Friends gave \$10,000 to National Wildlife Refuge Association (NWRA). FOMA board approved donation of \$3,000 to NWRA to support their activities.

CONT. FROM PAGE 2 - Kauai

uncertainty, jurisdiction disputes, and oil exploration.

The short-tailed albatross is a large pelagic bird with long, narrow wings adapted for soaring just above the ocean surface.

The bill is large, bright pink and hooked, with a bluish tip, has external tubular nostrils, and has a thin-but-conspicuous black line extending around the base. Adult short-tailed albatrosses are the only northern Pacific albatross with an entirely white back. The white head develops a yellow-gold crown and nape in mature adult birds.

The Laysan albatross, which has been known to establish nests on the Princeville golf courses, in yards of Princeville private homes, as well as at the Kilauea Point National Wildlife Refuge and other areas on the North Shore and elsewhere on Kaua'i, has a white head, neck and underbody, with a dark eye patch. The top of the wings are black, and the bill varies from gray to yellow with a darker tip. Legs and feet are pink.

Midway Atoll National Wildlife Refuge hosts the world's largest populations of Laysan and Black-footed albatrosses. In 2005, 487,527 Laysan albatross nests were counted at the Midway Atoll National Wildlife Refuge.



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KATHLEEN.LOY@MALLORYCO.COM**

From FOMA President**DARLENE MOEGERLE**

FOMA board members, Treasurer Bob Fields, President Darlene Moegerle and Molly Krival attended a Friends Workshop at Nisqually National Wildlife Refuge near Olympia, Washington.

The purpose of the conference, was to allow two representatives of each refuge Friends board to work in partnership with their Refuge Manager in developing long-term goals for their refuge. While each refuge in the nationwide system is unique, all are dedicated to the same large goals of protecting, restoring and managing the natural resources that we all cherish. The task of the workshop participants was to analyze the needs of our particular refuge in areas of visitor services, wildlife and maintenance and come up with a workable and cost-effective plan to accomplish those goals.

For the last several months the FWS Regional Office has been working on a new Visitors Program for Midway. Lots of data have been collected and are now in draft form.

Details of the plan need to be worked out before Midway can again welcome visits. However, as a board, we have reaffirmed our commitment to do whatever we can to assist the FWS in reopening this mid-Pacific treasure to wildlife enthusiasts, those interested in history and the very important veterans who lived on Midway.

LOGO Apparel and Mugs
other styles and colors too!

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Visit the FOMA website at:
www.friendsofmidway.org

*Friends Of Midway Atoll
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