The Winter Monitor
An electronic newsletter for the greater Piping Plover non-breeding community
Vol. 1, Issue 3, 1/09/07

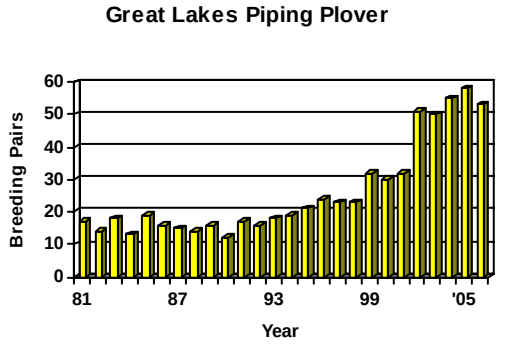
Editor's Note

Hello All. Yet another fun newsletter (I think). Thanks again to the contributers for this issue. I've been busy working on my dissertation and working on my house this holiday season. I hope that time was spent on the beach for most of you folks. Classes are starting back up next week, so we'll be back to a regular schedule. Otherwise, things are looking great on the plover end. Let us know if you would like to share any news or contribute to the newsletter. Also, if you think someone should be receiving this newsletter, let me know and I can check my mailing list and add them to it. Finally, I know someone is looking to volunteer in Georgia this winter. Any ideas out there? *Olivia LeDee, PhD Candidate, University of Minnesota*

Report from the Breeding Grounds in the Great Lakes

Although "our" piping plovers have long since left for warmer climates, recovery-related activities continue on the breeding grounds in the Great Lakes, as they have for the past two decades. The East Lansing Field Office of the U.S. Fish and Wildlife Service in Michigan leads a multi-partner program aided at recovering one of the Great Lakes most endangered species. The Great Lakes population of the piping plover was first listed as endangered under the U.S. Endangered Species Act in 1986. At the time of listing only 17 pairs were known to exist. Although the population remains extremely vulnerable to threats from shoreline development, predation, and demographic and environmental stochastic events, breeding pair estimates suggest that long-term management and protection activities have been effective in increasing reproductive success and total population numbers. In 2006, the population was estimated at 53 breeding pairs, which is more than one third of its way towards the recovery goal of 150 breeding pairs.

Recovery actions are on-going throughout the Great Lakes basin and are guided by the final recovery plan for the Great Lakes which was published in September 2003. Major partners in Great Lakes recovery include the National Park Service, U.S. Forest Service, Michigan and Wisconsin Department of Natural Resources, the Canadian Wildlife Service, and various tribes. These land-management partners actively protect habitat, conduct surveys, and implement nest protection measures. The University of Minnesota is currently conducting vital research on population demographics and distribution, as well as leading the banding activities. A salvage captive rearing program is also underway, which is coordinated by the Detroit Zoo. With their help, staff from zoos across the country have come to the Great Lakes to aid in piping plover recovery. These efforts are complemented by a number of dedicated volunteers who donate literally thousands of hours each season. Our work on the breeding grounds are further complimented by the great help of all those on the wintering grounds. Together we can look forward to continued recovery of this unique Great Lakes resident. Recovery Plan: http://www.fws.gov/Midwest/Endangered/pipingplover/recplan-fnl.html



Jack Dingledine, U.S.Fish and Wildlife Service

Banded Plover Discovered on Louisiana beach

Amateur Minnesota bird watchers have reported seeing a rare species of Plover while vacationing along the Louisiana coast. Using only 3x binoculars, the tourists recorded several of the birds cavorting on the shoreline. "Their markings resemble the *Piping Plover* with the exception of distinctive bands green, red, and orange bands on both legs", reported the excited tourists, "we think they must be the *Banded Plover* (*Charadrius Leggings)* judging by our guide book. Their status within their social group seems to be determined by the number of bands they exhibited, with three-banded birds dominating two-banded birds and so on". The visitors also reported the birds mingling with the taller *Piping Plover* although little meaningful dialogue was observed. In other news, biologists report seeing evidence of another rare species near the Texas coast, the *More or Less Tern*. These are believed to be the offspring of *Least Tern* and *Most Tern* couples who mated in the confused aftermath of late April snowstorms in Canada. This area is also the wintering ground for the rare *Not-So Great Bluish Heron*, a poor cousin of the *Great Blue Heron* that nest in condo-like sites on Lake of the Isles in Minneapolis. Their weak coloration is believed to be caused by the Lake of the Isles water quality. If you didn't catch it, this is a cute joke from my soon-to-be father-in-law, *Dale S.*

Important Wintering Sites of Piping Plovers in Texas: Part II of III

1. Bolivar Flats (29.41°N -94.70°W)

Bolivar Flats is an area of tidal mud flats and salt marsh near the town of Galveston in northern Texas. The tidal flats are increasing in size due to a jetty constructed around 1900 to stabilize the navigation channel into the Houston-Galveston port. Numbers of Piping Plovers in the area counted during the International Census were 82 in 1991, 101 in 1996, 53 in 2001, and 275 in 2006 (Ted Eubanks, pers. comm.). This area is listed as Piping Plover wintering critical habitat TX-36.

The Houston Audubon Society has purchased most of the land that surrounds Bolivar Flats, including Mundy Marsh and Horseshoe Marsh, for protection as a shorebird sanctuary. The chapter now owns over 2000 acres on Bolivar Peninsula, and they are actively working to preserve even more of the wetlands in that general area. This area has been designated an Important Bird Area of global significance, and an International Site of the Western Hemisphere Shorebird Reserve Network, due to the large number of staging shorebirds and wintering Piping Plovers. As well, the Houston Audubon Society is working on purchasing an additional 650 acres of land within this area. The Houston Audubon Society will erect signage restricting vehicle traffic and prohibiting loose animals, develop an oil spill contingency plan, and maintain the fence established by the city of Galveston that restricts vehicle traffic (except at very low tide). The Houston Audubon Society plans to build a more substantial fence, increase public education about the site, prepare a management plan, and construct a viewing platform. Potential future threats include a request by fishermen to dredge the slough next to the marsh, historic use by the Army Corps of Engineers as a source of sand, and urban development (http://www.crystalbeach.com/boliva~1.htm, T. Eubanks, pers. comm.).

2. San Luis Pass (29.09°N -95.12°W)

San Luis Pass is an area of actively accreting sand flats at the western end of Galveston Island. Numbers of wintering Piping Plovers counted during International Censuses were 40 in 1991, 29 in 1996, 1 in 1991 and 90 in 2006 (Ted Eubanks, pers. comm.), with 121 counted in east and west San Luis Pass in March 2006 (Sidney Maddock, pers. comm.). This area is listed as Piping Plover wintering critical habitat TX-34.

The area is threatened by major residential developments at the west end of Galveston Island, especially at Pointe San Luis. The developer may establish a sanctuary in the tidal flat area, but has not yet done so. In addition to threats from development, vehicles are a problem on the beach. Pointe San Luis is working with the city of Galveston to restrict vehicular traffic on these beaches (Ted Eubanks, pers. comm.).

3. Espiritu Santo (Shoalwater Bay and lagoon behind Dewberry Island) (28.35°N -96.58°W)

In an area not previously checked, the Texas Parks and Wildlife Department found over 400 Piping Plovers during the 2006 International Census in a shallow bay/lagoon system between the bayshore of Matagorda Island and the Gulf Intracoastal Waterway, at Shoalwater Bay and the lagoon behind Dewberry Island. Water levels were very low, so the birds were able to use large areas of exposed seagrass beds and mud flats that are normally submerged (Robyn Cobb, pers. comm.).

This area is controlled by the Texas General Land Office (TGLO), which can restrict oil and gas activities, dredging, construction projects and surveying between 15 July and 15 May each year to protect wintering Piping Plovers if the U.S. Fish and Wildlife Service deems it necessary. However, this would not affect activities not needing a permit or lease from the TGFO, including disturbance from recreational activities such as fishing, hunting, boating, etc., so this disturbance is likely the greatest threat to plovers in this area (Robyn Cobb, pers. comm..).

4. Matagorda Island (28.18°N -96.70°W) Matagorda Island is a coastal barrier island approximately 38 miles long, situated along the coastal bend of Texas in Calhoun County. The most significant areas for wintering Piping Plovers are along the gulf beach and on the south end near Cedar Bayou (the pass between Matagorda Island and San Jose Island). Numbers counted during the International Censuses were 111 in 1991, 13 in 1996, 11 in 2001, and 84 in 2006. The peak number counted in 2005 was 217 birds, averaging close to 5 birds per survey mile throughout the winter months of 2005 (Darrin Welchert, pers. comm.). This area is listed as Piping Plover wintering critical habitat TX 19-22.

Matagorda Island is cooperatively managed as the Matagorda Island National Wildlife Refuge and State Natural Area. It is managed as a Refuge unit with an overlay state park on the north end. Texas Parks and Wildlife Department has the lead responsibility for public use management on the island and U.S. Fish and Wildlife Service has lead responsibility for wildlife and habitat management. The refuge was established to support the national migratory bird management program and to conserve endangered species. There is no causeway, highway, bridge, vehicular ferry, public airport, etc, providing access to the island, nor is there any electricity, concession, or drinking water. All interior access is via hiking, biking or park vehicles during scheduled hunts or tours. No private motorized vehicles are allowed. Activities include salt-water fishing, hunting (in season), birding, picnicking and historical interpretation. Matagorda Island is known for its seclusion and untouched natural beauty. Threats to wintering Piping Plovers are minimal (http://www.tpwd.state.tx.us/huntwild/hunt/wma/find_a_wma/list/?id=48).

Important Wintering Sites of Piping Plovers in Texas: Part II of III

5. San José Island (28.00°N -96.93°W)

San José Island (also called Saint Joseph's Island), is a sand barrier island about 34 km long. Piping Plovers are found in variable numbers along the gulf beach, and often at North Pass (on the bay side of the southwestern end of the island). The Cedar Bayou area (pass between San José and Matagorda islands) also often contains significant numbers of birds. Numbers counted during the International Censuses (including Cedar Bayou) were 214 in 1991, 274 in 1996, 6 in 2001 and 109 in 2006. This area is Piping Plover wintering critical habitat 15-18.

The island is privately owned and largely uninhabited so there is little traffic, and the bayside area is hard to access. Threats to wintering Piping Plovers are minimal.

6. Redfish Bay Islands (27.88°N -97.13°W)

These island edges and exposed flats have fairly consistent numbers of Piping Plovers between San José Island and Aransas Pass to Ingleside. During past Piping Plover International Censuses, the number of birds reported from this area was 80 in 1991, 20 in 1996, 26 in 2001, and 93 in 2006. This area is a mosaic of shallow bay, natural and dredged material islands, large seagrass meadows, oyster reefs, and sand/mud flats. The birds in 2006 were found on an exposed oyster reef adjacent to sand/mud flat, and flats along the margin of an island; both areas are submerged most of the year (Robyn Cobb, pers. comm.).

This area is public land under the Texas General Land Office (TGLO). This is a high use area for recreational fishermen, so disturbance is likely the greatest threat to plovers here (Robyn Cobb, pers. comm.).

7. Port Aransas to Mustang Is. State Park (27.75°N -97.10°W)

This northern area of North Padre Island can hold large numbers of wintering Piping Plovers, particularly on the gulf beach. Numbers are inconsistent (generally 0 on the beach during the International Censuses), but Gratto-Trevor and Duncan observed 168 Piping Plovers when they searched the beach area on 24 Feb. 2005 (unpubl. data). This area is Piping Plover wintering critical habitat TX-8.

Below mean high water (MHW), the area is controlled by the TGLO, both on the gulf beach and bay side of the barrier island. Most of the area above MHW is privately owned, including the City of Port Aransas. The gulf beach has seen increasing levels of human disturbance from beachfront developments, visitors camping and driving on the beaches, etc. Beach cleaning efforts decrease foraging opportunities for plovers as well. One section of the gulf beach near Port Aransas has bollards to keep vehicles from the water's edge (to protect pedestrians), but there is no conservation plan for the plovers. One of the 'hotspots' for wintering plovers on the bay side is the basin to the NNE of the Nature Conservancy of Texas' Francine Cohn Preserve, and is privately owned, with no plover conservation plan (Robyn Cobb, pers. comm.).

8. Mustang Island State Park (27.67°N -97.18°W)

This state park south of Port Aransas contains both gulf beaches and bayside areas where Piping Plovers can be found, as well as seagrass/mud/sand flats exposed by low water in the bay west of the park. Numbers are usually highest towards the bay. Bayside counts during the International Censuses were 26 in 1991, 55 in 1996, 10 in 2001 and 109 in 2006. This area is listed as Piping Plover wintering critical habitat TX-6, 7, and 9.

The park is part of the state parks system and controlled by Texas Parks and Wildlife Department, with the area below MHW controlled by the TGLO. Vehicles can be driven on most of the gulf beach (some areas are closed to traffic), and increased levels of human disturbance on beaches plus beach cleaning activities reduce the usefulness of the beach areas to plovers. In addition, sand is being removed from dunes (which are roosting areas for the birds) to dump on the beach. However, due to state ownership, residential construction is precluded. The shallowly submerged flats directly west of the Mustang Island State Park bay shoreline support fairly large numbers of plovers (about 80 in 2006), and are totally controlled by the TGLO. Disturbance is likely to be low in this area because the shallowness of the water makes the area difficult to reach by boat (Robyn Cobb, pers. comm.).

9. Padre Island between Mustang Is State Park and Padre Is National Seashore (27.52°N -97.28°W)

This approximately 17 km section of North Padre Island sometimes contains considerable numbers of wintering Piping Plovers. For example, on 24/26 Feb. 2006, Gratto-Trevor and Duncan counted 107 Piping Plovers on this stretch of gulf beach, in the 13.5 km they searched (unpubl. data). This area is listed as Piping Plover wintering critical habitat TX-3 (N end) and TX-5.

Below MHW, the land is controlled by the TGLO, and above MHW, on the gulf beach by the City of Corpus Christi, Nueces County, or Kleberg County. Much of the land between Park Road 361 and the bay near the Newport Pass area is state-owned and part of the Mollie Beattie Coastal Habitat Communities Preserve. South of Packery Channel, all the bayside property above MHW is privately owned until the Padre Island National Park boundary. Where Packery Channel is under construction, direct protection of birds is listed in the permit. The conservation plan in Mollie Beattie provides some protection. Beach cleaning takes place in varying degrees along the gulf beach (Robyn Cobb, pers. comm.).

C. L. Gratto-Trevor, Canadian Wildlife Service, Environment Canada

POLL: What is the number one place where you would like to see wintering plovers surveyed? sample size= 2; 50% the Bahamas, 50% Mexico

If you see a marked Piping Plover…

1. Take care to keep disturbance of the bird to a minimum.
2. Please write down the **location**, **date**, **behavior** of bird, and a detailed description of the **bands**.
3. To describe a band combination, **describe each band and position on leg**:

Type: metal, color band, flag (band with a tab sticking out from the leg)

Colors: common colors are red, orange, yellow, dark green, light green, dark blue, light blue, white, grey and black.
Some bands are bi-colored/tri-colored (2/3 colors on one band).
Sometimes two bands of the same color are placed over each other on a leg (this may look like one very tall band).
Remember that bands can discolor, and occasionally fall off, so not every bird can be identified.

4. **Note if you are unsure of any of the bands or if you did not see all parts of the leg clearly.** Describe any injuries as carefully and completely as possible.
5. **Send an email with the details.** We'll let you know we got it and provide some information on the bird.

Examples *(Plover drawing by J. Zickefoose)*

Adult: X,L:Of,bO
Left leg = Metal(X) band above, bLack band below
Right leg = Orange flag above, light blue band over Orange band below

Chick: O,-:X,G
Right leg = Metal(X) band above, Green band below
Left leg = Orange band above

Adult: Og:XY
Left leg = Orange band over light green band below
Right leg = Metal(X) band over Yellow band on lower leg

Chick: XO/L:-
Left leg = Metal(X) band over Orange/bLack split band below

Dan Catlin

U.S. ARMY CORPS OF ENGINEERS

When you send a banded plover sighting to **piping.plover@usace.army.mil**, who does it go to? The answer is **Greg Pavelka**. Greg is wildlife biologist with the **U.S. Army Corps of Engineers** stationed at the Gavins Point Project on the Missouri River in southeast South Dakota. Greg's primary duty is administering the monitoring program for least terns and piping plovers on the Missouri River from Fort Peck Lake in eastern Montana down to Ponca State Park in northeastern Nebraska, a span of a nearly a 1,000 miles. Several of the banded piping plovers seen on the wintering grounds have a Corps of Engineers origin. Plovers sporting a light blue flag were reared in captivity by the Corps from 1995 through 2002. Plovers with a **green flag** were banded by researchers from the Virginia Polytechnic Institute (VPI) for a Corps funded study. The VPI researchers are studying piping plover usage of sandbars on the Missouri River below Gavins Point Dam. Debuting in 2006 are plovers with **red flags**. These plovers were banded by researchers from the U.S. Geological Survey. These plovers were banded on Lake Sakakawea, a Corps of Engineers reservoir on the Missouri River in North Dakota.

VISIT THE GREAT LAKES WEBSITE! Orange Flags and more…

The following is from: http://www.waterbirds.umn.edu/Piping_Plovers/piping1.htm

Beginning in the early 1980's, Francie Cuthbert, graduate students, research fellows and field assistant began to study the Great Lakes Piping Plover population and to work for its recovery. Most of this research was done in collaboration with the Michigan Department of Natural Resources and the U.S. Fish and Wildlife Service (East Lansing Field Office; Region III Office) and dozens of people from other agencies. During the breeding season, our research base is the University of Michigan Biological Station (UMBS) in Pellston, Michigan.

Please send reports to Olivia LeDee, plover@umn.edu or lede0025@umn.edu

Great Lakes Piping Plover Color Bands

Original Colors	Fade to	Code
Blue		B
BLack		L
Green		G
Yellow		Y
Red		R
Orange		O
Lightblue		b
Lightgreen		g
Metal		X

Split Bands	Codes
orange over blue	O/B
orange over yellow	O/Y
orange over green	O/G
orange over light green	O/g
orange over black	O/L
orange over red	O/R
orange over light blue	O/b

Triple-Split Bands	Codes
red/orange/red	R/O/R
yellow/orange/yellow	Y/O/Y
Green/orange/green	G/O/G
light green/orange/l.green	g/O/g
blue/orange/blue	B/O/B
light blue/orange/l.blue	b/O/b
black/orange/black	L/O/L

Inverse of split bands also used (e.g. blue over orange B/O)

White or Black FLAGS. Approximately 800 adults and over 400 chicks have been uniquely marked in Saskatchewan since 2002, for a movements/survival study. Each uniquely marked bird should have 5 bands: one white or black flag on an upper leg (above the 'knee'), a metal normally on the other upper leg (rarely, on a lower leg under a colour band), and 3 plain colour bands on the lower legs (2 on one leg and one on the other). Sometimes two bands of the same colour are placed over each other on a leg (this may look like one very tall band). Colours used on the lower legs include: red, orange, yellow, dark green, light green, dark blue, grey and black. Some chicks were non-uniquely marked with a white or black flag on one upper leg, a metal on the other upper leg, and nothing on the lower legs. **Please send reports to Cheri Gratto-Trevor,** Cheri.Gratto-Trevor@EC.GC.CA

Green Flags
Birds banded as adults: Each bird receives 4 color bands (2 on each lower leg just above the foot) and a **dark green flag** (GF) on either the upper right or upper left leg. The lower leg band colors include Black (B), Dark Green (DG), Gray (GR), Red (R), Yellow (Y), and White (W). We have not used metal U.S. Fish and Wildlife Service bands, except on three adults.
Birds banded as chicks: Each bird receives 2 color bands stacked in one of 4 positions on the leg: upper left, upper right, lower left, or lower right. The colors include Black (B), Dark Green (DG), Gray (GR), Red (R), Yellow (Y), and White (W), Orange (O), Dark Blue (DB), and Pink (P; pink is celluloid and may fade to a light pink color). The chicks also receive a dark green flag on one of the upper legs. If you see a flag but no bands on the lower legs, look for them on the upper leg opposite the dark green flag (bands can slide up into the feathers and become difficult to see).
Please send reports to Daniel H. Catlin, dcatlin@vt.edu

Northern Prairie Wildlife Research Center (USGS), Red Flags
Northern Prairie Wildlife Research Center (USGS) has initiated work to evaluate survival, productivity estimates, and movement for Piping Plovers on the upper Missouri River. Efforts began in 2006 with a limited number of chicks, but will expand significantly in coming years. Each uniquely marked bird should have 5 bands: one red flag on an upper leg, a metal on the opposite upper leg, and 3 color bands on the lower legs (2 on one leg and one on the other). Colors used on the lower legs are all solid colors and include: red, orange, yellow, dark green, light flue, dark blue, and black. Please report sightings to Jennifer Stucker, jstucker@usgs.gov

Saskatchewan.
Starting in 2001, the majority of birds banded at Lake Diefenbaker, SK had a **white band on the upper left leg.**
From 2002-2005, several hundred chicks were marked with a **light/dark green bicolour**, metal and 1-3 other colours at Chaplin Lake, SK. In 2002-2003, chicks were given a bicolour (various positions); metal upper leg; and one to two white bands (various positions, but not upper left). In 2004, chicks were given a bicolour on one upper leg, metal on the other upper leg, and 2 colours bands on one lower leg, nothing on the other lower leg. In 2005, chicks were given light over dark green bicolour which fades to yellow/black on a upper leg with the metal on the lower portion of the same leg. This was in combination with various colour bands in various positions. The colours we've mainly used have been: white, yellow, red, orange, light green, dark green, light blue, dark blue.We did use some celluloid bands which degrade quite quickly: light greyish-blue, lime green, dark forest green. We also 4 black bands in 2004 and even 2 white flags in 2001. **Please send reports to Sharilyn Westworth,** Sharilyn.Westworth@EC.gc.ca

Alberta.
All birds from Alberta get a Black and White bicolor, plus a metal and one other color (white, yellow, orange, light green, or another black/white bicolor). We have occasionally also used a Red/Dk Blue bicolor in place of the black/white, but unlikely to do this on a regular basis.
Please send reports to Dave Prescott, Dave.Prescott@gov.ab.ca