



Newsletter for Lake Michigan Volunteer AMBLE (Avian Monitoring for Botulism Lakeshore Events)

# 2011 • May & June

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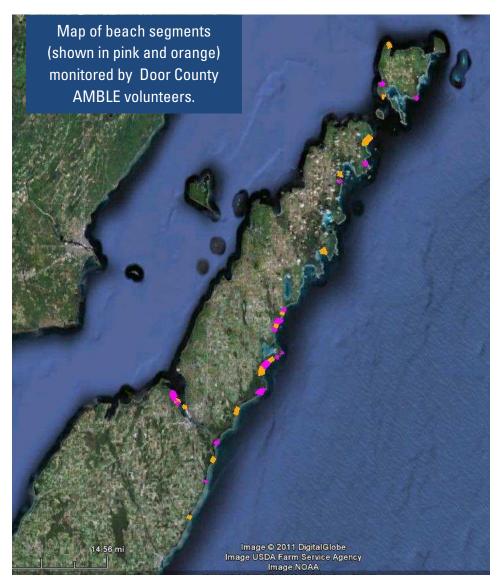
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U.S. Department of the Interior U.S. Geological Survey

# **Coverage Area**

Forty-nine Door County volunteers were trained as AMBLE beach monitors and/or carcass shippers in May, 2011. Another three were trained in June. Currently, we have AMBLE reports coming in from 29 sections of beach, a total of 14.8 miles of lakeshore surveillance!



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# **Data Summary**

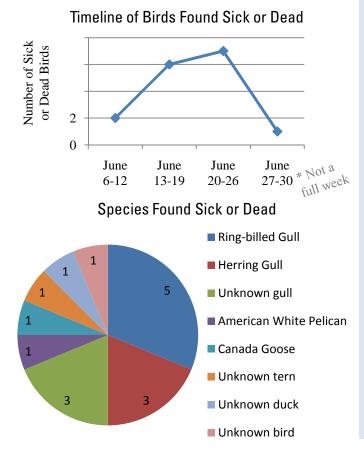
Door County beach segments monitored every 7-10 days by AMBLE volunteers average 0.5 miles in length. The longest segment is 1.2 miles.

There were 66 walking surveys reported by AMBLE volunteers in May and June, for a total of 35.5 miles walked collectively by AMBLErs.

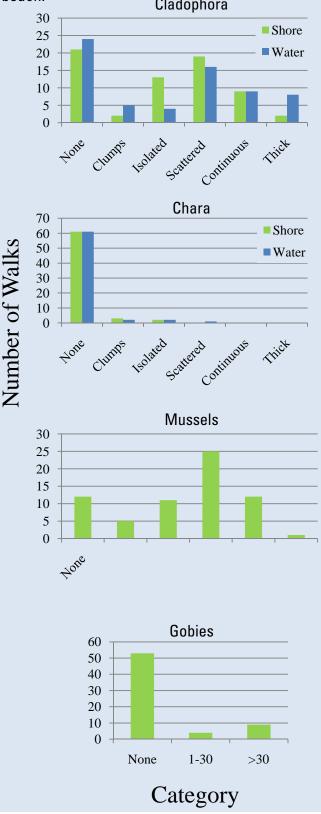
There were two birds observed sick (Canada Goose and Ring-billed Gull). Two more freshly dead birds (< 24 hrs dead) were found (American White Pelican and Ring-billed Gull). Twelve other bird carcasses were found decomposed (see pie chart of species found sick or dead).

There was roughly one sick or dead bird reported per mile of beach monitored. Over 3,300 healthy birds were reported; that's roughly 227 healthy birds per mile of beach monitored.

Trash Count - AMBLE volunteers removed 161 items of trash from Door County beaches!



The four graphs below show the number of walks in May and June in which AMBLE volunteers reported these categories of Cladophora (algae), Chara (algae), Mussels (invertebrate), and Gobies (fish) along their beach. Cladophora



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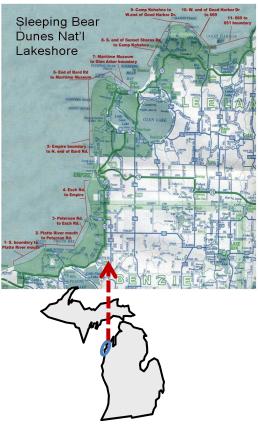
#### **Sleeping Bear Dunes**

Report from Amie Lipscomb – Avian Botulism Lead at Sleeping Bear

Twenty volunteers monitor roughly 32 miles of beach within the National Park Service's Sleeping Bear Dunes National Lakeshore in Michigan (see map). These volunteers follow the same protocol as AMBLErs in Door County and also send fresh bird carcasses to the National Wildlife Health Center in Madison for botulism type E testing.

In June, Sleeping Bear volunteers found 5 sick or dead birds; 1 Tundra Swan and 4 that were too decayed to positively identify (2 birds of prey and 2 waterbirds). However, on beaches near known Merlin (a type of falcon) nests there were 14 bird bits (just pieces of wings, tails, and feet) found. June might have been slow but July has already heated up, with the die-off numbers at 22 reported as of July 20<sup>th</sup>. Similar to your Wisconsin experience, volunteers in Michigan are seeing many, many dead alewives on the beaches and in the water.

The other big news from the shores of Sleeping Bear this summer is that they were visited by a film crew that is creating a documentary on the links between invasive species and avian botulism. A couple of volunteer beach monitors were filmed surveying a beach and burying a dead fish. The informational video on avian botulism in the Great Lakes should be about 10 minutes in length and completed this fall.



Press release about documentary: <u>http://leelanaunews.com/drupal</u> /index.php?g=node/30643

# **Banded Tern**



Band found by Ken Bussard on the leg of a dead tern.

Ken Bussard found a dead bird with a metal leg band on June 15. Ken removed the band from the bird and put it in a plastic bag. After getting a GPS point and recording characteristics of the scarce remains, Ken buried the bird on the beach that he and his wife Mary monitor.

When Ken emailed to let me know that he had recovered a band and had sent it to the National Wildlife Health Center, I was excited. Not excited about a dead bird, that's always sad, but excited about discovering the history of the bird who wore the band. Finding a band is like finding a needle in a haystack. To be honest, I didn't expect any bands this summer, let alone so quickly!

Ok, enough with the suspense... when I typed the series of numbers etched on the band into the U.S. Geological Survey's Bird Banding Lab website (<u>http://www.pwrc.usgs.gov/BBL/</u>), it kicked back these results: Caspian Tern, banded as a chick on July 31, 2002 on Clapperton Island, Ontario. The Canadian researchers who banded a little chick in 2002 now have data on where the tern traveled and how long it lived.

# **Dead Alewives**

"From the Chicago waterfront to the Mackinaw Bridge, the shores of Lake Michigan were taken over last month by dead alewives." – Time Magazine, July 7, 1967

Sound familiar? Almost all AMBLE volunteers have reported alewives (a type of fish) on their beaches. I talked to Bradley Eggold, Wisconsin Department of Natural Resources (WDNR) fisheries biologist, about the die off. Eggold said that, while tests are still pending for viruses and bacteria, there was nothing found during necropsies ("necropsy" is an autopsy performed on wildlife) of the fish that indicated disease.

The alewives washing ashore seem to be mostly last year's hatchlings. Eggold suspects that conditions in the lake were favorable for alewives last year, causing a population explosion. What we are seeing this year is perhaps just the leveling off of the population. Furthermore, alewives are native to the Atlantic Ocean and life in their relatively new fresh water environment can be challenging. They do not handle fluctuations in Lake Michigan conditions readily. As Eggold put it "If you look at these things sideways, they turn over and die." While the rotting fish on shore are unpleasant for beach goers, the sign of a large alewife population is good news for trout and salmon fishermen (and women!) because these game fish eat alewives. Consider burying fish carcasses as you AMBLE because they could harbor botulinum toxin. Source: <a href="http://www.time.com/time/magazine/article/0.9171,899581.00.html#ixzz1SgUbyl28">http://www.time.com/time/magazine/article/0.9171,899581.00.html#ixzz1SgUbyl28</a>



Alewives Reporting Sturgeon

Mike and Lissa Wagner found a sturgeon (another fish) during their AMBLE in Potawatomi State Park on July 20<sup>th</sup>. Mike called me that afternoon. I mentioned this sturgeon when talking to Bradley Eggold

about the alewife die off and he directed me to Scott Hansen, the WDNR fisheries biologist in Sturgeon Bay. Scott was interested in sending a fisheries technician to locate this sturgeon so I forwarded him the information from the Wagner's AMBLE beach description. The WDNR tech found the sturgeon along the Potawatomi shoreline and, using a handheld scanner, he inspected the body for the reading of a Personal Identification Tag (a.k.a., PIT tag... I know it's redundant to say "tag" because it's in the acronym, but that's

what they're called). PIT tags are a microchip that are coded with a unique series of numbers and then placed under the skin of an animal. Sturgeon released in area rivers have PIT tags. Finding a unique tag number would have given the fisheries biologists information about this fish's movement, growth rate, and lifespan but no PIT tag was found this time.

Sturgeon found should be immediately reported to Scott Hansen, 920-746-2864, Scott.Hansen@Wisconsin.gov, 110 S. Neenah Ave, Sturgeon Bay.



Sturgeon

Photo credit: Alice Van Zoeren

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## **ISSRM** Conference

On June 6, I presented a poster entitled "Establishing a citizen science program – Lake Michigan volunteer AMBLE (Avian Monitoring for Botulism Lakeshore Events)" at the International Symposium on Society and Resource Management (ISSRM) in Madison, WI. Co-authors were NWHC wildlife epidemiologist LeAnn White who had the idea of starting a volunteer program in Door County, two biologists at Sleeping Bear Dunes National Lakeshore who help coordinate their volunteer monitoring program, and Door County's own Marne Kaeske of The Ridges Sanctuary who was an invaluable partner during the creation of AMBLE.

## **Online Data Entry**

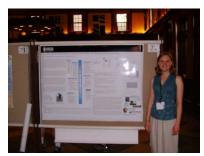
A huge thank you to everyone using the online data entry portal! By using the portal, your data goes directly into the Great Lakes avian botulism database here at the National Wildlife Health Center. This not only saves time, but it cuts back on the potential for errors by decreasing the number of times the data are transferred.

The data entry portal continues to evolve. Our IT department is hard at work making this system as user friendly as possible. Thank you for all your feedback! We know there have been hurdles but we have been very impressed with your diligence. Once the bare bones of the web portal are working flawlessly, we hope to add more features (perhaps an interactive map, the ability to send photos, etc.).

A couple of notes -

1) You may have noticed that the length of your beach has been changed in the portal; that is so we can easily calculate birds/mile.

2) If you observe a bird that is not in the data portal species list, use "Other – see Notes" and put the species identification in your notes. We will then add the species to the drop down list.



Jenny Chipault displaying AMBLE poster at ISSRM conference.

# **Collecting Carcasses**

- Only collect "fresh" carcasses no nasty smell, no maggots, and make sure the feathers don't pull out easily. This roughly corresponds to birds < 48 hours dead, but recent heat may hasten the decomposition! As a general rule of thumb to gauge freshness, ask yourself "would I eat it?" (but don't actually eat it!).</li>
- For any sick or dead bird you find, please fill in the back of AMBLE data sheet. In the online portal you will see "Add Sick Bird or Carcass Information" next to each species of bird that you observe; click there to add the information from the back of the hard copy data sheet.
- Make sure to indicate in the notes section which state park freezer holds your collected carcasses.
- Please double tag and double bag carcasses. Clearly label with date, species, location, "found dead," and collector's name and contact info. See protocols handed out at training (pages 9 & 17).
  If you AMBLE after state park office hours, keep in mind that you won't have access to freezers.



Need more supplies? Let us know!

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## **New Bird ID Guides**

Linked to the AMBLE website are two new Great Lakes bird identification guides. One of them by the Ohio Division of Wildlife showing live birds. And another really spectacular guide put together by Alice Van Zoeren from Sleeping Bear Dunes that shows birds and fish both live and dead and gives information about avian botulism type E in Lake Michigan. Let us know if you would like a hard copy of Alice's 9-page guide.

Guides can be found at: www.nwhc.usgs.gov/AMBLE/



Photo credit: Alice Van Zoeren



Photo credit: John Tracey

# **Tell Us About Your Beach**

Some AMBLE volunteers are writers. Some are photographers. ALL are experiencing nature week-byweek along their beach. Please share.

In the next edition of the *AMBLE Ramble* newsletter we would like to highlight a few of your beaches from your perspective. Please submit writings and/or pictures of your AMBLE beach to Jenny Chipault at <u>AMBLE@usgs.gov</u> by September 15.

# **Thanks to AMBLE volunteers and partners!**



#### Disclaimer

Information presented in this newsletter is not intended for citation as scientific literature.

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Unless otherwise noted, all writing and pictures in this newsletter are the product of Jenny Chipault, USGS National Wildlife Health Center.