

# SUMMER WITH THE SEABIRDS

The life of a Maine Coastal Islands National Wildlife Refuge Island Researcher

## Archive 2011 – July, June and May

### Welcome!

Welcome to the Maine Coastal Islands National Wildlife Refuge Island Researcher blog! Here you'll find posts and multimedia projects created by island researchers spending the summer on the refuge's many islands. Please check back often for updates!

## Archive for July, 2011

### That's all folks!

Posted in [Metinic 2011](#), tagged [Arctic Tern](#), [Black Guillemot](#), [Common Eider](#), [Common Tern](#), [Gulf of Maine Seabird Working Group](#), [Leach's Storm-petrel](#), [Metinic Island](#), [Tern Productivity](#) on July 28, 2011

We are packing our gear and cleaning the cabin! Jennie and I head back to the mainland today and we wanted to give you one last update on our season.



We crossed off each day after we finished the dinner dishes. It's wild to think that it's all over for 2011...

### Census

The Gulf of Maine Seabird Working Group (GOMSWG) census was started on June 17, 2011, and finished on June 20, 2011. The Tern nest count for the census was 484, with a Lincoln Index of 1.029, resulting in a corrected total of 498 Tern nests on the North End of Metinic. This represents about two thirds of last year's population. Common Tern nests were marked with a blue flag, while Arctic Tern nests were marked with a red flag. On the NE Point we identified 307 of 498 nests (61% of NE Point colony). We

counted 122 ARTE, 185 COTE nests. We estimated that the colony was comprised of 40% Common Terns, 60% Arctic Terns. The South End of the island is privately owned and was surveyed by boat, 2 pairs of Terns were present, but no nests were confirmed.



#### Productivity

Fledging/reproductive success was low this year for Arctic Terns (under the 1 chick/nest USFWS goal), but Common Tern productivity improved from last year and met this goal. The Arctic Terns suffered from widespread predation events early in the season which resulted in the loss of many eggs and young chicks.



#### Provisioning

We were able to follow 6 Common tern and 8 Arctic Tern nests throughout the season, for a total of 96 observational hours and 599 feedings. COTEs fed at an average rate of 1.6 feedings/hour, while ARTes



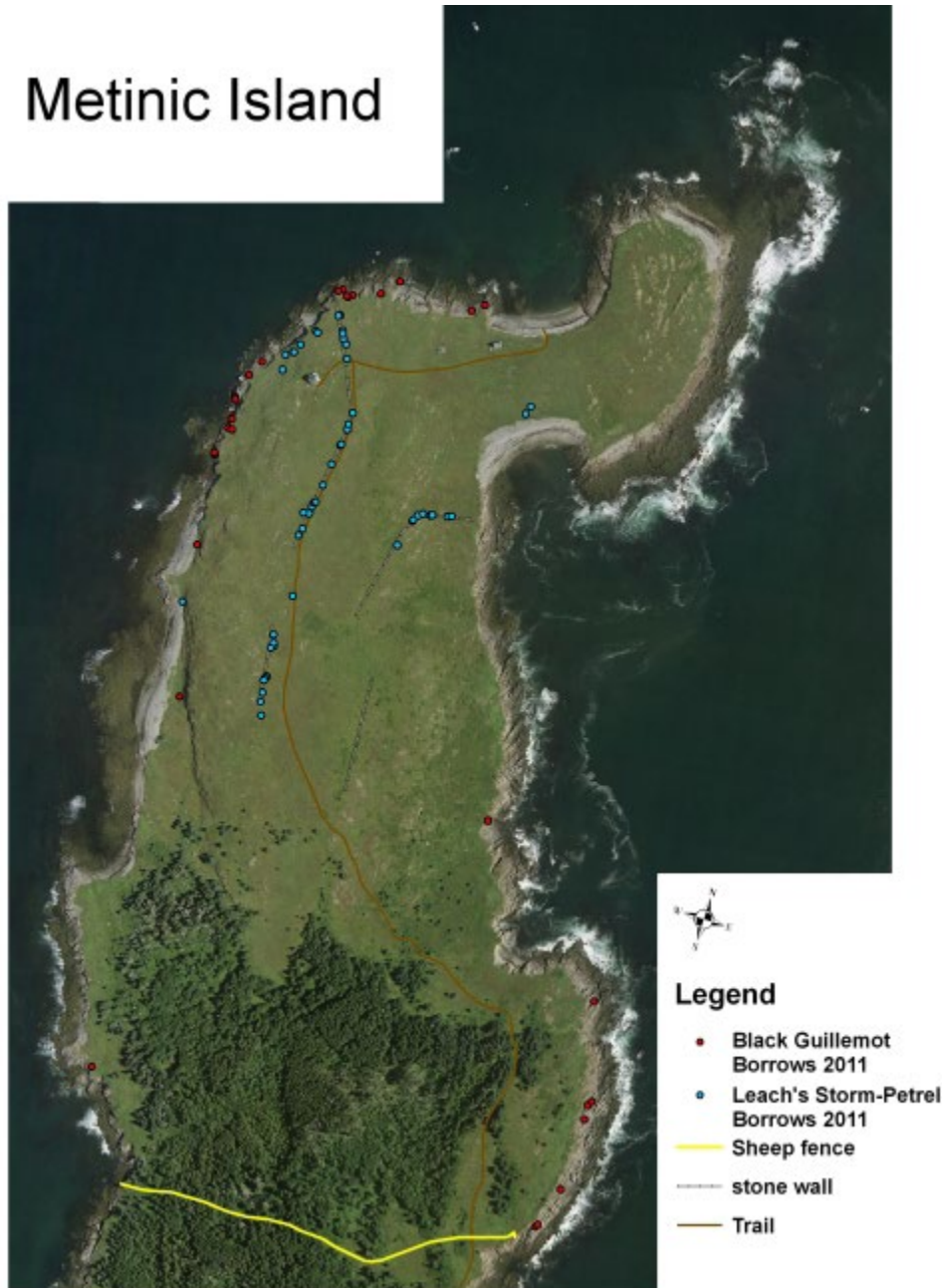
fed at 0.7 feedings/hour. Both Arctic and Common Terns delivered Atlantic Herring most frequently to their chicks consisting of about 55% and 30% of their diet respectively. Butterfish was the next most frequent delivery for both species, making up about 30% of deliveries. Herring deliveries gradually declined and butterfish deliveries gradually increased as the season progressed. Feedings overall slowed considerably starting in the third week of July especially for Arctic Terns.



#### Guillemots

32 Guillemot nests were located with a hatch success of 62% and an egg depredation rate of 12.9%. This data is not a complete set because of the number of guillemots incubating through all checks. Three adults were still incubating at the end of July, so hatch success could be higher than calculated. 19 chicks were found and 14 were banded, weighed, and measured.

# Metinic Island



## Petrels

53 Leach's Storm-petrel burrows showed signs of activity (smell, fresh piled dirt, activity at night) early in the season, however only 7 were noted to have eggs or adults present at the end of July. At the end of our field season, 17 burrows were no longer active and 29 still showed some activity yet nothing could be seen with the burrow scope.



### Common Eider

Eider numbers were very low this year averaging only 50-100 eiders at each morning count. Previous years Eiders had averaged between 150 and 300 for morning counts. Only 30 observations of eider crèches were documented (at least 4 separate crèches). Five eiders were banded by USGS and MDIFW.



### Incidental Sightings

Species highlights: Northern Gannett, American Oystercatcher, Razorbill, Atlantic Puffin, Whimbrel.

We had a tremendous amount of fun out here this summer, and we hope you all enjoyed being able to follow along! If we peaked your interest and you would like to get involved or support our efforts makes sure to check out the Friends of Maine Seabird Islands site: <http://maineseabirds.org/html/home.html>!

Signing off!

-The Metinic Crew



## Where have you been? Where will you go?

Posted in [Metinic 2011](#), tagged [Arctic Tern](#), [Geolocator](#), [Migration](#) on July 27, 2011



For how much information they can hold, the geolocators are very small!

As the Terns get ready to migrate south at the end of the season, it makes you wonder “where are they going?” Last year on Metinic Island, refuge staff attached geolocators onto Arctic Terns in an effort to find out just that! These particular geolocators work in an incredible way. GPS or satellite tracking equipment is expensive and heavy. These lightweight little units monitor time of sunrise and sunset instead, and from that data can give an approximate location on the globe.



This little device has tracked an almost 40,000 km round trip migration, we can't wait to see the map!

This year after a tremendous amount of searching, locating, and trapping, we were able to recover a few of the geolocators and are waiting to receive the data back from them. Soon we will have a map of the flight paths of a few Terns nesting on Metinic, and we will know not only where they went after last year, but how they got there!

-The Metinic Crew

## Guilliemot Chicks!

Posted in [Metinic 2011](#), tagged [Black Guilliemot](#), [Black Guilliemot chicks](#), [Metinic Island](#) on July 23, 2011



Black Guillemot chick! (about actual size)

Today we started banding Black Guillemot chicks! We have been waiting excitedly to start this, and could hold off no longer! We had to wait this late in the season because Guillemot chicks take a size 4 band (2 sizes bigger than terns!) and we needed to find chicks that are old enough so the band will not just slip off. In addition to banding the chicks, we also weigh the chicks and take their wing cord length. These measurements will give us an idea as to if and when these chicks are likely to fledge.



Measuring wing cord

In the next couple days we will be checking all the burrows that had eggs in them for chicks. "Grubbing" chicks is almost like a puzzle; we have to figure out where the chick hid, and then how to maneuver our arms so we can reach into the burrow and grab the chick. This can be difficult as some of the burrows are very deep! Our chick banding efforts will let us assess guillemont productivity this nesting season by comparing hatch and fledging rates to our original egg counts.



Charlie thought they looked cute enough to eat, but swears the chick started it!

## Puffins Chicks!

Posted in [Petit Manan 2011](#) on July 22, 2011



A group of puffins at the "condo" -- an area of highly concentrated burrows (each marked with green and yellow numbering)



Around the 4th of July, we began noticing puffins delivering food to their burrows, which can mean only one thing... chicks are hatching! Puffins feed small fish to their young. Here on Petit Manan, their diet mostly consists of butterfish, herring, and the occasional sand lance or hake. They can carry numerous fish in one beak load – as many as 10 – with the help of backward-pointing spikes inside their bill and on their tongues. The record number of fish carried in the bill of a puffin is 62!



Puffin chick!

After an incubation period of around 42 days, puffin chicks begin to hatch. Each pair of puffins rears a single chick in a rock or sod burrow. The chick spends all of its time in the depths of the cool, dark burrow, until it is around 38 days old and almost ready to fledge. To get an idea of the number of chicks that are hatching and how their growth and development is progressing, two or three times during the season we go puffin grubbing!



Refuge biologist, Sara, and PMI crew member, Christa, measuring the tiny wing of a puffin chick

So far this season we've found 21 puffin chicks. For the first few weeks, they're hardly recognizable as puffins – they're teacup sized fluff balls with dense, black, down. Unlike their parents' colorful and elaborate bills, puffin chicks have modest, black bills that are reminiscent of a raven.



Captured puffin

Sometimes when we stick our arms into burrows we're met with an unpleasant surprise: a sharp bite from the powerful bill of an adult puffin! We take measurements on the adults too: weight, wing and bill dimensions. And if they're not already banded, we do that too.

Check back soon for updates on our other Alcids buddies: the razorbills and guillemots!



Christa and Andrew processing a captured adult puffin

## Fish! Its what's for Dinnah!

Posted in [Metinic 2011](#), tagged [Common Tern](#), [Metinic Island](#), [provisioning](#) on July 21, 2011

...And breakfast, and lunch! For four days every week we each perform a "provisioning" stint of three hours. During provisioning stints, we observe our selected 5-7 nests of chicks to see what their parents are bringing them to eat and how often each chick is getting fed. We record the prey type, the size of the prey in comparison to the adult's bill length, which chick from which nest is getting fed, and the time of the feeding. Charlie has been watching 6 Arctic Tern nests, with a total of 6 chicks, and Jennie has been watching 6 Common Tern nests with a total of 12 chicks! You can't leave the blind during a provisioning stint, so if you need to pee it means taking a trip to ye ol' coffee can...



Common Tern Provisioning nests (Orange Flags)

In order to tell all our chicks apart we color them with markers! Each nest is a different color, and then if there is more than one chick in the nest, the first born chick (the A chick) gets colored on the head, and the second born chick (the B chick) gets colored on the breast. It is quite entertaining to watch little brightly colored chicks run around!



Two Common Tern provisioning chicks. The purple head denotes an "A" chick, and the purple breast is the "B" chick.

One of the big challenges of provisioning is to correctly identify the fish species. This can be difficult since some of the feedings happen extremely fast! Those chicks are hungry! Some of our common fish are Atlantic Herring, Butterfish, Pollock, Sand Lance, Hake, Needlefish and a variety of invertebrates. From our observations, we can analyze the chicks' diet composition and feeding rate.





A Common Tern with a Pollock

## Metinic Crab Cakes

Posted in [Metinic 2011](#) on July 19, 2011



I know we promised recipes, and there has only been one so far. The seabird work picked up pace quite quickly, and we have been so busy that we haven't been able to post as much as we would like. Then our neighbor Eugene dropped off a 5 gallon bucket of crab claws. The feast that ensued definitely deserves a post. These crab cakes were well worth the three hours it took to pick the crab meat out!

#### Metinic crab cakes

- 1 pound fresh crab meat
- 1 chopped bread and butter pickle
- 1 chopped onion
- 2 cloves garlic
- 2 table spoons ranch dressing
- 2 table spoons spicy brown mustard
- One large egg, beaten
- 2 cups seasoned bread crumbs
- Salt and Pepper to taste

Sauté chopped onion, garlic and pickle until browned, then let cool. Combine crabmeat, ranch dressing, brown mustard, egg, 2 tablespoons bread crumbs and sautéed onion, garlic, and pickle and mix thoroughly. Form into 2 inch cakes, roll in the remaining bread crumbs, and then refrigerate for 2-3 hours before cooking. Pan fry on medium heat in olive oil until outside is a crispy golden brown.

I served the crab cakes with sautéed kale topped with balsamic reduction, and candied carrots. Considering that these crab cakes used only about 1/5 of the crab meat, we might be having them again soon!

#### Time Flies!

Posted in [Metinic 2011](#), tagged [Arctic Tern](#) on July 17, 2011



Almost all of the fluffy down has been replaced with feathers, and he has gained the black cap adult Terns are known for.

They grow up so fast! We spotted one of our Tern chicks in flight yesterday. It is really difficult to get a good picture of the little guy but as soon as we do we will post it! In the meantime here are two pictures of an Arctic Tern fledger we found while banding chicks across the island. He must be a day or two away from flying, and is the closest we will get to having our hands on a flyer!



The flight feathers are now fully developed and any sign of sheaths has been preened out of the wing.

## Feathers!

Posted in [Metinic 2011](#), tagged [developing feathers](#), [Metinic Island](#), [Tern chicks](#) on July 13, 2011



They are so big now!



This chick is about 12 days old and is already almost 90 grams! Soon his down will be replaced with the feathers that are forming underneath it, but getting a good picture of those is far more difficult than you would think.



Emerging feathers!

Feathered wings are starting to appear across the island, and even though these developing wings won't allow the chick to fly yet that doesn't stop them from trying. One of the highlights of our day is watching "jumpers" turn into the wind and flap as hard as they can while bouncing up and down.



Even tiny little tails have started appearing!

They haven't made it anywhere yet, but any day now we expect to see one of our chicks fly by the blind.

-The Metinic Crew

## The Metinic Mansion

Posted in [Metinic 2011](#), tagged [Cabin](#), [Metinic Island](#) on July 8, 2011

Here, after popular demand, is a quick video tour of our cabin here on Metinic. This spacious cabin can accommodate four, but currently houses two. (We miss you Courtney and Adrienne!)

And our Tern chicks just keep growing! Feather shafts are sprouting out of their wings as their fluffy little bodies mature. We'll keep you posted with plenty of pictures as they progress.



These sheaths will slowly open to reveal the developing feather inside.

## Metinic's Independence Day Celebration!

Posted in [Metinic 2011](#) on July 5, 2011

Metinic Island was socked in by a dense fog last night, so no fireworks from the mainland were seen. But that did not stop us from celebrating! Brian Benedict, who has been on the island so Charlie could have his birthday weekend off, made an all American meal of burgers, fries, chips, and carrot sticks! The fries were an awesome surprise since we can't just drive down the road to McDonalds!

After dinner we set off some fireworks of our own! Well OK, no we were not breaking the law, they were morning glory sparklers! Here are some pictures of our AMAZING display!



I think Brian is having a little too much fun!



Jennie and her morning glory



The morning glory extravaganza!

OK, fun's over, back to work!

~The Metinic Crew; Jennie, Charlie and special guest Brian Benedict



## My, how fast you grow!

July 2, 2011 by [Charles Walsh](#)



A Common Tern productivity plot

One of the big projects that take place on many seabird islands in Maine is productivity monitoring, or seeing how many chicks survive to fledgling age. For the Gulf of Maine Seabird Working Group, fledging age is 15 days old for Tern chicks. To monitor productivity, we take a sample of the colony and fence off about 10% of the nests into small plots. These plots allow us to contain the chicks and to find them day after day. We have 5 plots; two Arctic Tern plots, and 3 Common Tern plots. These contain 59 nests in all! The number of Arctic and Common tern nests in our plots correlates to the overall species ratio for the colony.



Jennie banding a chick

Every day, we go through our plots to check the progress of eggs and chicks. When chicks hatch, we band them so the next day we will know which chick is which, or which one has hidden from us.

We also weigh chicks so we can get an idea of how fast they are growing. Chicks can start out weighing as little as 10g, but one Common Tern chick started at 26g and is now 46g only 6 days later!! It is amazing how quickly they grow!



Charlie weighing a chick

At the end of the season, data from our productivity monitoring will be used to calculate a survival rate and growth rate for chicks. This can then be compared to other seasons. Last year, on average, Common tern pairs fledged 0.85 chicks per nest, and Arctic Tern pairs fledged 0.32 chicks per nest. Common Terns usually do fledge more chicks per nest because they have a shorter migration. This allows them to invest more energy in chick rearing. It will be interesting to see how this year's rates compare to last year. We are very excited to watch our chicks grow a little more each day! We can't help feeling like all these chicks' Aunt and Uncle!

On a side note... We spotted an American Oystercatcher today! This was a rare sighting since the Oystercatcher's breeding range is typically only into Southern Maine. We are a little too North for this to be a common sight. Sorry no pictures, it was at a distance!

Have a great 4th of July weekend!

~The Metinic Crew; Jennie, Charlie, and special guest Brian Benedict

# Archive for June, 2011

## Finding the Fishing Hot Spots!

Posted in [Metinic 2011](#), tagged [Metinic](#), [Radio Telemetry](#), [Tern Foraging](#) on June 29, 2011



Jennie listens intently for the high pitched chirp of a radio signal.

Last year on Metinic, a new question started being researched; “where do the Terns go to fish?” Terns take shifts incubating chicks and foraging for fish to bring back to their mate or young. Last year we started performing “foraging flight surveys”. This consisted of watching to see what direction Terns return with fish from, or what direction they take when they leave, and then taking a compass bearing on



that point. This doesn't tell us where they are getting the fish from, but at least we know where to look! The data from last year was overwhelmingly unidirectional towards the northwest.

This year we are expanding the research to include a telemetry aspect. Telemetry, put simply, is putting a radio transmitter on an animal to be able to track its movements with an antenna. A couple weeks ago five Arctic Terns and five Common Terns were outfitted with small radio transmitters, each with a specific frequency that we can use to identify individuals. Then their breast feathers were dyed a deep red, so that they can be identified within the colony. The dye allows us to confirm that the birds are still incubating and our efforts have not caused abandonment, as well as identify an individual as a radio bird in flight.



Increasing antenna height even a few feet can tremendously help signal reception.

Twice a day we raise our antenna as high as possible and rotate it in slow sweeps of the island hoping to pick up the radio signals and establish presence or absence of the individuals within the colony. We have also been experimenting with signal range, and whether we can get bearings on Terns leaving the colony for foraging.

These efforts have been paired with USFWS staff using a similar antenna system on a boat. The hope is that the antenna on the boat can pick up a signal from a bird leaving the colony to forage, and then staff members can radio track the bird to see where it is going to fish. If radio birds are not within signal range, then the direction from the foraging flight surveys can be used to try to find a foraging flock. Hopefully we will be able to get information on how far these birds need to go to find food, and how long that takes them.

If we are able to establish where foraging Terns are going day after day to find fish for their chicks, we can then help to protect this vital resource. If this resource is not protected, Terns will have a much harder time finding schools of fish to feed upon, which could lead to weaker fledglings or birds who choose not to reproduce in order to save energy for migration. One current concern is the establishment of wind turbines in vital feeding areas. We welcome a push towards more sustainable energy practices in Maine but a lot of consideration needs to be put into placement. Hopefully we will be able to gather enough information to help assist that tough decision making process.

## Rainy Days

Posted in [Petit Manan 2011](#) on June 27, 2011



Bad weather on PMI

The season is heating up out on Petit Manan, especially now that we have tern chicks to monitor! Usually we have projects to keep us on our toes every moment of the day: first thing in the morning we count seabirds from the lighthouse tower, then we're on to weighing and banding tern chicks, reading identification bands on adults, looking for Roseate terns, and keeping an eye out for any predators. So, we're pretty busy... at least, when the weather cooperates...

But on days like today when the temperature outside barely reaches 50 F, winds are gusting over 15mph, and it's spitting cold rain on and off, well, our days are a bit different.

We avoid going out into the tern colony when it is wet and cold since it disturbs the birds that are incubating eggs or caring for their chicks. When they are frightened off their nests, even briefly, their eggs and/or chicks can get chilled, which may impede development inside the eggs, and chicks can get hypothermia.

So we are stuck in the house. Needless to say, we all love being out in the field, but we've become very adept at keeping ourselves busy indoors! Here are a few of the activities that keep us preoccupied:



Toasty fire going strong!

Priority #1 on a really cold day is keeping the wood stove going!



Andrew, diligently entering data

All of the observations that we make are added to databases or excel files, so there is always data entry to be done.





L --> R: Morgan (barely visible behind the desk), Christa, and Andrew busily painting the living room.



Drawing numbers for the bedroom doors

Good researchers take pride in their facilities, which is certainly the case here at the William H. Drury Jr. Biological Research Station. We keep our work and living space tidy, but we've also undertaken a larger project of painting the entire inside of the two-story building! It's quite an endeavor, but perfect for rainy days like today.

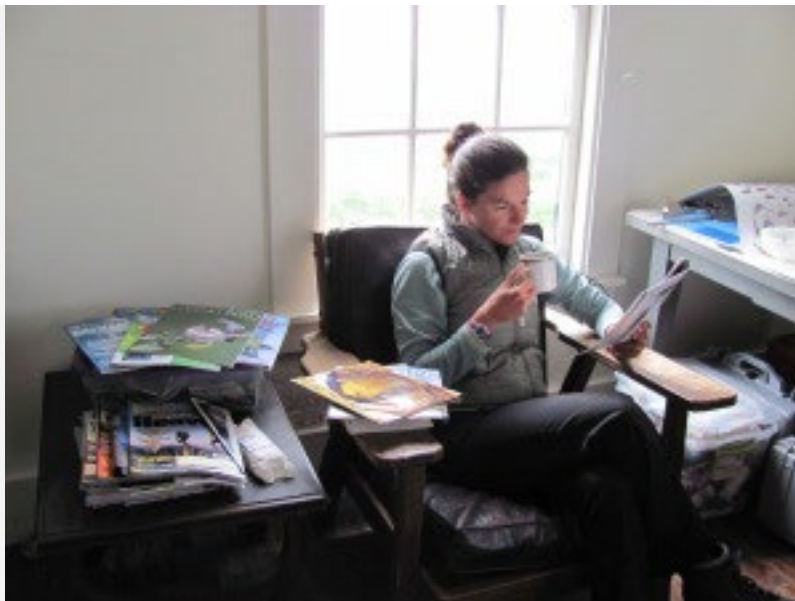


Mediterranean-esque dinner night with: baba ganoush, tabouli (minus parsley), and salad (not pictured = pita, falafel, and greek dressing)



Enjoying family dinner

Food is also a really big deal. “Family Dinners” are an important part of our day. Everyone on Petit Manan loves food, and cooking is a great rainy-day pass-time!



Christa reading

We also have time for reading – both educative and leisurely. Collectively we’ve read at least 14 books, including great titles like *The Big Year* by Mark Obmascik, *Life Between the Tides* by Les Watling, Jill Fegley, and John Moring, *Spoonhandle* by Ruth Moore, and *Sand County Almanac* by Aldo Leopold.

Yes, so all and all, “in-house days” aren’t so bad, but it looks like the sun’s peeking out, better get ready to head into the field!

## Happy National Guillemot Appreciation Day!

Posted in [Metinic 2011](#), tagged [Black Guillemot](#), [National Guillemot Appreciation Day](#) on June 27, 2011



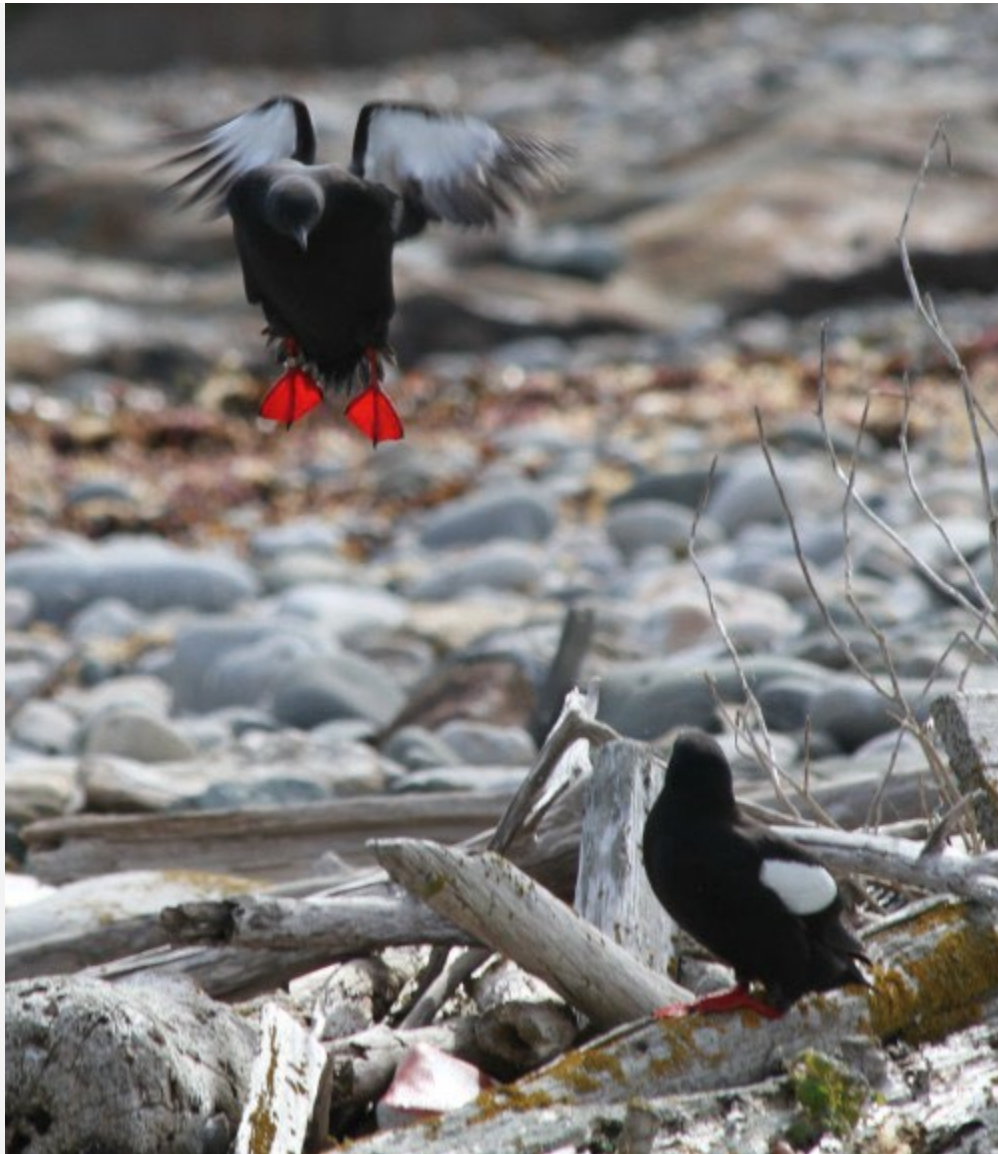
Photograph by Brette Soucie.



A Black Guillemot takes off from its driftwood perch. Photograph by Brette Soucie.



Black Guillemots may be the most abundant alcid in Maine waters, but that doesn't mean that they deserve any less attention than their charismatic cousin the Atlantic Puffin! They are one of the few seabirds on the Maine coast year round. Unlike other alcids most Black Guillemots are sedentary, and if they do migrate it is only short distances from their breeding colonies. Black Guillemots feed in mid to shallow waters, and often loaf on intertidal rocks or on the surface in between foraging dives. These habits make them one of the more visible alcids from the mainland. Breeding plumage is solid black with white wing patches. This makes the species easy to identify at a distance, but up close you will notice the bright red legs and gape, which give these charming birds a splash of color.



A Black Guillemot about to crash land into driftwood pile. Photograph by Brette Soucie.

I wish we could get a good video of Guillemot behavior, if we watch them for too long we just break up laughing. On land their movements are a combination of awkward waddles and hops. Black Guillemots are wing propelled swimmers and require strong short wings to literally fly under the water while foraging. High wing loading (mass vs. wing surface area) makes slowing down in aerial flight very difficult. As a result these birds seem to crash land into just about anything to stop themselves.

Our next Guillemot check is coming right up so we hope to have some pictures of Guillemot chicks up for you soon!

\*The incredible photography for this post was taken by Brette Soucie, Metinic Supervisor 2010. Her patience and artistic eye are responsible for our ability to share such beautiful images with you. Thank you Brette! We hope you are taking tons of pictures on your recent adventures!

Always appreciative –The Metinic crew

## Eider Parade!

Posted in [Metic 2011](#), tagged [Common Eider](#), [ducklings](#) on June 26, 2011

These Common Eider hens decided that our front yard was the safest route for leading their ducklings to the water! I just happened to glance out the window at the right moment. We thought you may appreciate how adorable the scuttling little ducklings are. We are truly lucky to be out here and so close to all of these birds.

-The Metinic Crew

## Looking back – As the season ‘Terns’ (Part II)

Posted in [Metic 2011](#), tagged [Adrienne Leppold](#), [Blackburnian Warbler](#), [Common Yellowthroat](#), [Foreign recapture](#), [Magnolia Warbler](#), [Metic Island](#), [Rose-breasted Grosbeak](#) on June 25, 2011

Well, now that the excitement and anticipation for the first tern chicks has subsided, we thought it was time for a little landbird interlude. Below are some of the featured species captured during our spring migration monitoring on Metinic this year.

The second year (SY) male Rose-breasted Grosbeak pictured below, aged by the contrasting black and brown feathers on the wing, was just one of a few of its species banded this season (SY means it hatched out last summer). Unlike most other passerines where it is strictly the female that incubates the eggs, male Grosbeaks often help with this aspect of parental care. Among passerines, males are typically the song-makers, however, female Grosbeaks will also sing their robin-like song quietly when changing laces with the male on the nest.



While every bander hopes to have a bird they banded captured elsewhere, that is not the main purpose of most modern day banding efforts. It is the data collected during the banding process that provides details about each individual that is especially valuable. This kind of information cannot be obtained through other methods. For example, identifying age and sex ratios enables us to structure demographics of populations, and body mass and fat measurements provide information about the condition of each bird at the time of capture.



Our first foreign recap! This SY male Common Yellowthroat shows off his band.

With that said, every bander still hopes to find that *needle-in-a-haystack*, and on May 31<sup>st</sup>, WE DID! It was not surprising to walk up to a net on Metinic and see a Common Yellowthroat, it was not surprising to find it had already been banded (there is actually quite the population of breeding Yellowthroats on the island), but it was surprising, and I recognized instantly, that we had not banded it!

This foreign recapture (i.e. a bird captured more than 90 miles away from the location of its original banding) was originally banded on Plum Island, Massachusetts (a station run by Parker River NWR) on May 21<sup>st</sup>. Ten days and 110 miles later, he found his way into one of our nets on Metinic Island. Only future recaptures would tell us for sure, but it appears as though he may have been setting up a breeding territory on Metinic. I noted a developing cloacal protuberance, which indicates that a male is in breeding condition, and he had dropped from 11.0g at original capture to 9.7g, suggesting he was no longer in a migratory state.





A handsome shot of "George", affectionately named by his original captors.

Because of their prevalence on the island, we would expect Common Yellowthroats to be the number one species banded, but they were surpassed this year by Magnolia Warbler (93 to 90). While Magnolia Warblers breed in Maine and at higher elevation sites throughout New England, more than 50% of their global breeding population is dependent upon the boreal forests to our north. Because these habitats are especially sensitive to changes in climate and are increasingly threatened by timbering practices and oil and natural gas development, it is important that we closely monitor boreal dependent species. With their populations largely occurring in remote, inaccessible areas, it is important that monitoring efforts continue where concentrations of these birds occur during migration. Through the partnership between the Refuge and the University of Maine and a number of other network collaborators, we are doing our part to study and conserve these species throughout the Gulf of Maine.



The Magnolia Warbler (SY male pictured above) was once called the Black-and-Yellow Warbler. Interestingly, the current name came from an observation made of this species in a magnolia tree during migration. Other than now sharing a name, there is no connection with this species' life history and its namesake.

Finally, when we caught the male and female Blackburnian Warblers pictured below together in the net, we just couldn't pass up on this great opportunity for comparison, and photo taking! The male's flame orange throat is probably this species most striking and unique feature. It is actually the only North American warbler with an orange throat. As with many of the other migrants banded this spring, Blackburnian Warblers are considered neo-tropical migrants, meaning they breed in Canada or the U.S. during our summers and winter in Mexico, Central, or South America. Months prior to being captured on Metinic, these two birds departed from South America, and possibly from as far south as Peru or Bolivia.



A male (left) and female (right) Blackburnian Warbler. As with most dimorphic bird species, the males are more brightly colored and conspicuous than females.

Authored by Adrienne J. Leppold with Courtney Viall (and special guests Charlie Walsh and Jennie Wiacek). All photos by Adrienne J. Leppold.

## Always One Day Behind!

Posted in [Metinic 2011](#), tagged [Metinic Island](#), [Tern chick](#) on June 23, 2011



Tern chicks hatch with 5 o'clock shadow, I think that's what makes them so cute!





I didn't expect to see him as i walked by, I did a double take! The pips in our adjacent productivity plot have tripled overnight. More chicks are on their way!

Right on schedule, found this little bundle of joy right outside one of our productivity plots! Tern chicks are Semiprecocial. Their eyes are open, they can stand, and take food within a few hours of hatching. These young chicks will stay under an incubating adult until food arrives, and quickly return to the warm safety of its parent after food is delivered. We will be keeping track growth rates and fledging success through an enclosed sample of the population. As well as the rate and quality of food delivered through a different sample of chicks. All of this is about to start on islands across the Gulf of Maine stay tuned for more updates from Metinic and Petit Manan! Posts on provisioning, productivity and telemetry are coming soon!

## Tern Chicks on Petit Manan

Posted in [Petit Manan 2011](#) on June 23, 2011

It has finally happened! We have tern chicks on Petit Manan! Only a couple so far, but with thousands of eggs on the island... there are sure to be more. Here are a few pictures, but we'll have more information about the chicks and our research soon!



Newly hatched tern chicks



After just a few hours, the newly-hatched, damp, limp little chicks turn into these adorable little fluffs!





Notice the white tip on its bill? That's called an egg tooth. It's used to help break out of the egg, and it falls off soon after hatching.



## A Terning Point: The Census

Posted in [Metinic 2011](#) on June 22, 2011



Matinicus Rock has a great diversity of nesting seabirds! We saw Puffins, Razorbills, Common Murres, and Laughing gulls on our field trip.

A major landmark of our field season is the GOMSWG Census. GOMSWG stands for Gulf of Maine Seabird Working Group, and is a collection of professionals who pool their knowledge and efforts together to provide greater insight to the condition of our seabird populations. This census, which focuses on nesting Terns, occurs on many islands in the Gulf of Maine, and allows us to detect yearly variation in the density of nesting seabirds. Our census was completed yesterday after being rained out on Friday. We also took a day trip on Monday to Matinicus Rock to assist the Maine Audubon crew complete their census. We had a great time seeing a different island, and the hospitality was unmatched!



Our census line progressing down the cobble beach.

To census, a tight line of staff and volunteers progress through the colony and mark each nest with a Popsicle stick. Upon marking the nest, the clutch size (number of eggs) is shouted to the recorder, who shouts the number back in order to confirm that the correct number was recorded. Recording sounds very simple until there are 6 people shouting at the same time in a dense nesting area, and the entire process is being drowned out by the commotion of upset Terns.



A Common Tern nest Marked from census. The Popsicle stick marks the nest, letting us know that it was counted.

Luckily the line stops and waits for the recorder. We don't know how Charlie's voice survived the recording process. After the colony is combed, the group walks two transects to count how many nests are marked vs unmarked. From this we can establish a correction factor estimating the number of nests we may have missed, and calculate a final population estimate for the season. Our final corrected population for this year is 498 nests, which is about two thirds of our population last year. Metinic Rock's numbers are up though, and they say they have read bands on several birds banded on Metinic. Hopefully this immigration accounts for our loss.

On Metinic we have a 30 meter grid system that covers the entire Tern nesting area. This grid not only keeps us on track as we progress through the colony for census, but by uploading nest numbers into a GIS database, we can monitor shifts in habitat use and nest density over the island. This information is crucial to tracking the effectiveness of management efforts. If a particular grid suffered from uncharacteristic levels of predation, are Terns as likely to nest within the same area the following year? If we manage vegetation by excluding the sheep from one area and instead mow the vegetation, does one provide more productive nesting habitat then the other? Considering these are question that take years to answer, the grid and census are the most viable means of answering them.





Pipping has progressed around an egg. The anticipation is KILLING us!

## Shorebird Chicks!!!

Posted in [Metinic 2011](#), tagged [chicks](#), [Killdeer](#), [Metinic](#), [shorebird](#), [Spotted Sandpiper](#), [USFWS](#) on June 18, 2011



A young Killdeer chick caught on the cobble





Jennie holding an almost fledged Killdeer chick. This little guy could fly about 5 feet at a time!

We have more chicks on Metinic! Two Killdeer nests have hatched, and our first Spotted sandpiper chicks were found yesterday! Our first Killdeer nest hatched almost a month ago and the chicks are just about to fledge (begin to fly). Charlie was able to catch a Killdeer chick while it was still fluffy, and again, a few days ago, when it could almost fly away from him! We never found either nest, but two new young and fluffy Killdeer chicks have now appeared in the tern colony! Killdeer are a large plover with two black rings around their neck, but these "shorebirds" are not confined to coastlines. Their breeding range is the northern United States to central Canada and can be found on the coast, on estuaries, and even in fields. Breeding adults are well known for feigning injury, displaying a "broken" wing to predators. This tricks a predator into thinking the adult is an easy meal. The Killdeer will lure the predator away from the nest site, and then suddenly fly away when eggs or chicks are safe.



Spotted Sandpiper chick, notice the huge feet! Most shorebird chicks are precocial, up and running right after hatching.

Our first Spotted Sandpiper chicks hatched from a nest that we had not found (we have three nests flagged), and are, we believe, our cutest chicks yet! We spotted two chicks but we could have been missing some since they are very small and camouflage with the cobble.



Charlie wanted to keep it, but Jennie was a voice of reason...

Spotted Sandpipers bob their tails up and down when they are standing, and the chicks are no exception! It was adorable to watch clementine sized fluff balls bob up and down. Their breeding range is the northern United States up through Canada. They prefer pebble beaches on lakes, streams and seashores as nesting sites. Jennie caught one that was stumbling away from her, ensuring the photo op! Enjoy the pictures!

And soon to come.... Tern chicks! On Thursday we found three eggs with "pips"! Pips are little spider web like cracks on an egg that are caused by a chick poking at the shell with its bill from inside!



A pip in a Arctic Tern egg. This chick wants out!

The chicks have to "pip" in a circle around the eggshell in order to pop the top of the shell off. A chick will continue in a circle until it can finally poke its bill through the eggshell. This is called a window! After a chick makes a window, it still continues to break the shell in a circle until finally the top pops off! This whole process can take up to four days! We could find our first chick today! Now if only the rain and fog would go away so we can find it....

~Waiting in anticipation, the Metinic Crew, Jennie and Charlie

## Metinic Eider Round Up!

Posted in [Metinic 2011](#), tagged [Common Eider](#), [Metinic Island](#) on June 16, 2011



Kelsey and Jennie make their way through the Bayberry.



This week on Metinic we had the opportunity to participate in the annual Common Eider round up! We grabbed our boots and our nets and headed into the brush! Now finding an Eider in the bushes isn't easy, and getting a net in front of her before she can flush to the water is even harder. Jennie disagrees; she scared one right into her net!



Maine Department of Inland Fisheries and Wildlife biologist Brad Allen bands an Eider hen that Jennie caught.

Common Eiders are devoted mothers. They do not feed during incubation, and may lose up to 45% of their initial body mass! Within the first week of incubation females will leave the nest to drink freshwater, then stay on their nests around 20 days unless disturbed. Once ducklings hatch, the hen leads them to the water and nonbreeding hens join them to create a protective "crèche". These crèches are crucial for defending the ducklings against predation from Great Black-Back Gulls

Common Eiders are an important harvest species in Maine, and require management to protect the populations from decline. Mark and recapture roundups like ours on Metinic, combined with band reports

from hunting mortalities allow biologists to set bag limits. In recent years those limits have had to decrease in response to increased hunting pressure.



An Eider in the hand is definitely worth two in the bush on Metinic, Charlie didn't catch a thing!

These long lived ducks have reproductive models more similar to seabirds than other ducks. They have deferred sexual maturity, small clutches, and long lifespans. Because of this, females have the option of taking a year off from breeding. Traditionally there were 300 Common Eiders nesting on Metinic Island, this year it was estimated to be about 25 on the north end. There were plenty of female Eiders on the water so hopefully they are just taking a year off. At least our new ducklings will have a lot of "aunts"!

A giant Metinic Thank You goes out to Maine Department of Inland Fisheries and Wildlife biologists Brad Allen and Kelsey Sullivan, and U.S. Geological Survey biologist Dan McAuley. We had a blast on our Eider round up!

~ The Metinic Crew (Charlie Walsh, and Jennie Wiacek)

## A Fluffy Surprise!

June 13, 2011 by Charles Walsh

This week on Metinic we have spent a few of our afternoons scouring the coastlines for Black Guillemot burrows. Black Guillemots are the only bird of the Alcid family (the Puffin family!) nesting on Metinic since other Alcids prefer to stay farther offshore. Black Guillemots nest in rock crevices along the shorelines and in order to monitor their nesting success we have to find their burrows! A burrow with an egg in it is pictured in our previous post "Eggcellent".

As we were hunting for burrows, Charlie happened to stick his head in a crevice that was occupied, not by a Black Guillemot, but by a Great Black-backed Gull Chick! The chick was probably only a couple days old and screamed defiantly at us as we ogled at its cuteness. We have also seen our first few Common Eider ducklings of the season swimming on the water with their mothers. These groups of Eider ducklings and mothers are called "Creches". We have certainly been excited to have our first tastes of what is to come; chicks galore!



Great Black-Backed Gull chick!

~The Metinic Crew, Jennie and Charlie



## Puffins on Petit Manan

June 11, 2011 by [MCINWR](#)



**Atlantic Puffins**

Here on Petit Manan Island, we spend much of our time watching terns: figuring out how many of each species we have, counting nests and eggs, reading bands, determining what they're eating, and making general behavioral observations. But it's always a treat to get to work with our photogenic little Alcids on the rocky shoreline: the Atlantic Puffins!



Each female puffin only lays one egg

We try to be objective researchers, but let's face it: puffins are pretty darn cute. Currently there are over 200 puffins on the island, and many of them are incubating eggs! A female only lays a single egg inside a burrow. Sometimes puffins use crevices created by large, pink-granite rocks along the shore, and other times they dig burrows in the soil along the vegetation line. They use their bills to loosen the soil and their feet to kick it out. These burrows can be three feet deep! On Petit Manan, puffins also inhabit artificial burrows that we've created using wooden or plastic boxes with tunnel-like entrances made from tubing. They often use the same burrow year after year.



An artificial puffin burrow



A puffin egg inside artificial burrow #97

For the most part, we leave the puffins to their business of hanging out on the rocks, feeding on fish offshore, and incubating their eggs. But we do spend time observing them from afar to read their metal identification bands.

With this information we can ascertain whether the same puffins are returning from year to year, what their success rates have been (in terms of laying eggs and fledging young), and whether they are using the same burrows. Many of the rock burrows are marked with numbers in green and yellow paint so that we can identify specific locations.

We also periodically investigate the burrows to determine how many eggs have been laid. This can be a bit of a challenge since some of the burrows are very small and deep.



The "snake" tool for looking into puffin burrows

For the most difficult crevices, we use a nifty piece of equipment that we informally call "the snake." A small, lighted camera with a long, bendable neck can be inserted into the burrows that we can't access, and we can look at the image on a screen.

But the hardships of investigating burrows (e.g. sandwiching your body into a rocky, guano-covered crevice to peer into a burrow, all-the-while being dive-bombed by angry Common Terns) are all worthwhile when we get the pleasure of spying on an incubating adult!



Christa, Morgan, and Andrew checking for puffin burrows

Keep checking back for updates, because if you think adult puffins are adorable... wait until you see what their chicks look like!





Burrow 210



Puffin in burrow 210



Puffin face!

Posted in [Petit Manan 2011](#) | Tagged [Petit Manan](#), [Puffins](#)

## Eggcellent! 2011

June 9, 2011 by [Charles Walsh](#)

The Terns have started to settle down here on Metinic. Nests are popping up everywhere, but the Terns are not alone! Take a look at all the wondrous little 'chicks to be' we have discovered so far!



This Arctic Tern has three eggs! No wonder it chose a soft grassy cushion next to the granite ledge.



This Arctic Tern decided on a shell nest for the season, classy!



Common Eiders create a blanket of down feathers for their nests, and even tuck the eggs in before leaving them. This helps the eggs stay warm and hide them from predators.





Spotted Sandpiper, we almost stepped on this nest when we found it! Checking it daily to ensure we get a chance to see the chicks up close.



Killdeer, this little shorebird had already hatched its clutch before we could find its nest. So that we do not spoil the impending chick pictures, here is a great shot of our Killdeer nest from 2010. Photo Credit: Brette Soucie



Black Guillemots nest in cavities of the rocky Maine coastline, you can only imagine the amount of searching it took to find this egg.





Great Black Backed Gull, this nest was in the open. These gulls are so large that they have few predators to hide from.



Herring Gull, amazing color variation within a single nest



A Savannah Sparrow nest. These eggs are no larger then your thumb nail!

Posted in [Metinic 2011](#)

## Looking back – As the season ‘Terns’ (Part I)

June 5, 2011 by [Charles Walsh](#)

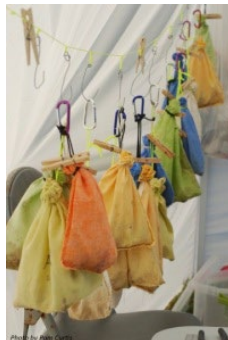


Mist net sunrise on Metinic Island

It's 3:45am and alarms are ringing on Metinic Island (they're set at a more hospitable 5:00am in the fall). Mist nets, used to capture passage-migrants that have landed on the island, are open and active at first light. Migration monitoring is underway!

As many of you following this blog are aware, the refuge-owned portion of this island has been managed as part of a coordinated seabird restoration effort in the Gulf of Maine for the last thirteen years. But, what happens on Metinic before and after the seabird nesting season? It turns out, A LOT, as was discovered in the fall of 2009 and substantiated through spring and fall migration monitoring efforts since.

Just who are these early risers and what are they doing? Migration research on Metinic is a collaborative effort between the Refuge and the University of Maine's Holberton Lab of Avian Biology. A variety of techniques including visual surveys, acoustic sampling (recording species specific calls given by migrants flying over at night), and banding are being used to monitor bird movements on Metinic. Results of this ongoing research have since led to an international effort to document bird movements throughout the Gulf of Maine region.





Left: The “catch” from a busy net round. Birds captured in mist nets are brought back to the banding tent in cloth bags and await processing before being released. Above: This adult male American Redstart was one of more than 600 birds captured on the island this season, a total achieved even with weather precluding banding on almost half of the days.



Photo showing a diverse array of band sizes from hummingbird to hawk. The inset picture is included to provide scale for the hummingbird band, which comes printed on a flat sheet of metal and is shaped into bands by each bander.

This spring, migration monitoring on Metinic began on 1 May and continued through 7 June. Of the techniques mentioned above, banding, in particular, offers the unique opportunity to study birds in the hand and provides detailed information about individuals. Nets are checked regularly throughout the day and birds brought back to the banding tent are fitted with a small aluminum band containing a unique nine-digit number. Essentially, a “social security number” for each bird. Birds are then aged and sexed, a series of measurements are taken (which provide information about the size of the bird and its energetic condition), and then each individual is promptly released.





Jennie releasing a Common Yellowthroat after processing.

Importantly, while anecdotal observations of migrants have shown that Metinic, as well as many other offshore islands in the Gulf, provides valuable stopover habitat for many species of birds during migration, specific use of islands by migrants has not previously been studied. With proposed and planned energy-related developments throughout the Gulf of Maine, migration research on Metinic, and throughout the region, is especially timely for identifying potential threats these developments may pose to migrants.

Stay tuned for Part II, where we'll feature select species captured this season!

Authored by: Adrienne J. Leppold with Courtney Viall (and special guests Charlie Walsh and Jennie Wiacek)

Posted in [Metic 2011](#)

## Painting Purple Popsicles for the PMI Predator Project

June 5, 2011 by [MCINWR](#)



Tern on an egg (through the spotting scope)!

Life and death unfolds at an alarming rate here on Petit Manan Island. Thousands of eggs hatch every summer. At the peak of the season, Common Terns, Arctic Terns, Atlantic Puffins, and Black Guillemots (just to name a few) can be found on almost every surface and in every crevice on the island. But a whole host of predators are fully aware of this phenomenon – in June, PMI is ripe with adult birds, chicks, and eggs all ready for the picking. Peregrine Falcons, Bald Eagles, Harriers, Greater Black-backed Gulls, Herring Gulls, and Laughing Gulls are just a few of the predators that have already found a few meals on PMI this summer.



The PMI Crew (minus Christa) painting popsicle sticks

In all this madness and mayhem, the research team is trying to get a gauge on the effects of predation on some of the species nesting on the island – especially Arctic and Common Terns. How many eggs are being laid and how many are being predated for each species? With several hundred nests already established, it's a little difficult to keep track of such details! So over the years, the Refuge staff has devised a method of labeling nests with small wooden stakes – more commonly known as Popsicle sticks!



Stake indicating the nest number, species (COTE = Common Tern), date inserted and number of eggs, and the number of eggs at the check date

While observing the tern colony from the blinds scattered around the island, whenever we notice a nest we place a Popsicle stick (which we paint purple so that we can easily spot it on the ground) nearby that indicates the stake number, the date that the nest was discovered, the tern species, and the number of eggs in the nest. As that number changes (because more eggs are laid or because of a predation event),

we update the stakes accordingly. At the end of the season we use this data to calculate success rates for each species.



Arctic tern on its nest, marked by a purple stake

The stakes will also come in handy when we do the big island-wide census, which is coming up soon! Check back for updates!

Posted in [Petit Manan 2011](#) | Tagged [Arctic Tern](#), [Common Tern](#), [Island](#), [Petit Manan](#), [Predation](#), [Productivity](#)

## Fancy bracelet you got there... Now hold still!

June 2, 2011 by [Charles Walsh](#)



A marine ornithologist's two best friends. The seclusion of a blind, and an accurate spotting scope.

One of our early season priorities while working on Metinic is re-sighting banded Arctic Terns. Tern banding is one of our responsibilities late in the breeding season, but banding efforts continue in their overwintering sites and everywhere in between. US Federal bands come in two varieties, the first being Federal ID bands which have 9 digits xxxx-xxxxx. These bands act much like a social security code for

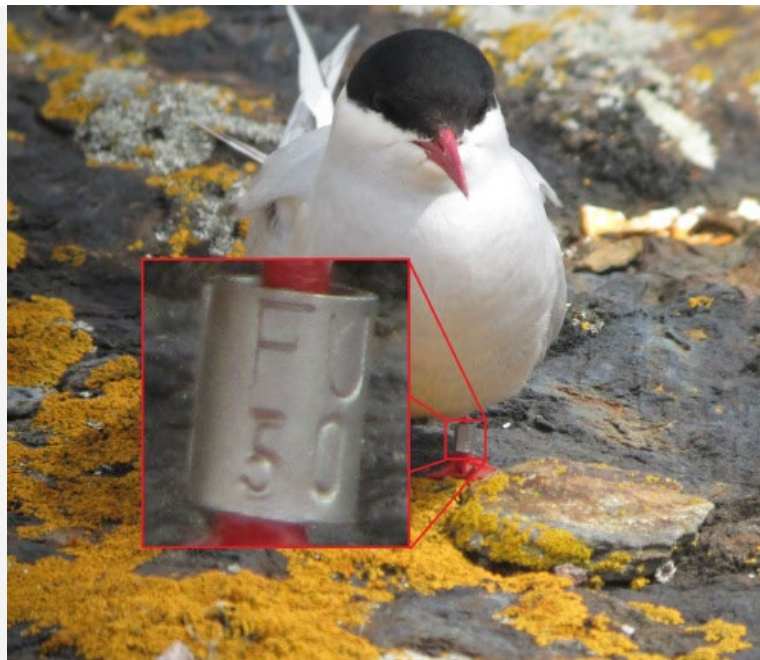


the bird, as no other individual will have a band with the same number. This number repeats once around the band and is very difficult to read, even with a spotting scope.



Even with a spotting scope, BBL bands can be extremely difficult to read.

Because of this, species of interest like our state-threatened Arctic Terns and federally endangered Roseate Terns also have a field readable band. Normally these consist of two letters over two numbers. These bands are larger and the code repeats twice around the band for easy reading.



Field readable bands make identifying individuals easier, but can still be time consuming if the bird is moving or far away.

So why do I get so excited when an Arctic Tern shifts just enough for me to get the last two digits of his field readable? All of our banding and re-sighting information gets entered into a database called Sterna Finder. This database can tell us not only where the bird was born and how old it is, but everywhere it has been seen since being banded. This information is used for a meta-population study, tracking breeding tern movements across the refuge islands. Does one colony's chicks become another island's breeders? That's what we're trying to find out. Plus it's pretty cool to find out the bird you were watching was banded in Brazil and is older than you.

Respecting our feathered elders,

Metinic Crew (Charlie Walsh, Jennie Wiacek, and special guests Courtney Viall, and Adrienne Leppold)



# Archive for May, 2011

## Now it's our Tern!

Posted in [Metinic 2011](#), tagged [Arctic Tern](#), [First Egg](#), [Metinic Island](#) on May 31, 2011



Metinic's first egg!



A pair of Arctic Terns between copulation attempts.

Finishing in a close second, we found our first egg this morning on Metinic! Petit Manan did a fantastic job discussing the Tern egg and its camouflage (see below), so we won't bore you with repetition and instead highlight a few differences. This little gem belongs to an Arctic Tern, and here on Metinic they prefer to nest on the exposed granite ledges in the center of the colony.





On one of the many granite outcroppings, the egg has very little protection from the elements or predation.

Many times there is almost nothing to an Arctic Tern nest, and the eggs will just sit in a rocky depression. Here the camouflage does very little for the egg's protection, but being located in the center of the nesting area provides enough protection in itself. Terns are aggressively territorial so most nest predation occurs on the colony fringes. These Arctic Terns rely on a buffer from their even more aggressive Common Tern neighbors to chase off predators before getting to their eggs.

Looking forward to an Easter egg hunt as June begins!

Metinic Crew (Charlie Walsh, Jennie Wiacek, and special guests Courtney Viall, and Adrienne Leppold)

### First Tern Egg of the Season Award Goes to...

Posted in [Petit Manan 2011](#), tagged [Common Tern](#), [Cryptic camouflage](#), [Egg](#), [Petit Manan](#), [Sunset](#) on May 30, 2011



Sunset during the evening perimeter walk

During our evening perimeter walk today, we spotted the first Common Tern egg of the season!



Common Tern egg

This little speckled beauty is about the size of a walnut and is amazingly well camouflaged. The creamy base color of the egg matches the minimalistic dry-grass nest perfectly, while the soft-toned speckles help it blend into the shadowy substrate. Tern eggs are predated by Herring Gulls, Black-backed Gulls, and Laughing Gulls, all of which frequent PMI, so this cryptic camouflage is critical to the survival of the little tern-to-be. Keep checking back for updates, because you know what comes after eggs..... chicks!



Common Tern preening

## What's Cookin' Good-Lookin'?

Posted in [Metinic 2011](#) on May 30, 2011

Sometimes the field kitchen can be your best friend. Many people assume we are out here eating ramen for dinner and I am here to dispel that myth. Here on Metinic we feel that family dinners are important not only for time efficiency but keeping a cohesive and happy crew. Cooking for yourself and others can help you eat healthier, use veggies creatively, conserve fridge space, and learn new recipes from your crewmates! Here is the first recipe from our season we would like to share with you.



It only takes a little bit of care to turn something simple into something scrumptious!

### **Sage and Orange Stuffed Acorn Squash**

(Feeds four, surprisingly filling!)

Ingredients:

- 1 box instant stuffing
- 5 tablespoons of butter
- 1 large orange
- 1 large onion
- 2 Acorn squash
- 4 Tablespoons honey

Spices: cinnamon, nutmeg, lots of sage

First, halve the acorn squash and remove the seeds. Once clean, add a dash of nutmeg and two dashes of cinnamon to each squash half. Peel the orange and cut the segments into half inch pieces. Line each squash half with some orange pieces and a tablespoon of honey. Place the four halves into a glass baking dish and cover with tin foil. Bake at 400 for about an hour or until tender but not completely cooked. During this time finely chop the onion and sauté in 1 tablespoon of butter 2-3 minutes until just becoming translucent. Add several tablespoons of sage until onions are thoroughly coated in sage and butter. Cook the stuffing as per box instructions, then combine with onions. When the squash is tender, stuff 'em! Return to oven about ½ hour or until squash is thoroughly cooked. Enjoy!

Bon appetite,

Metinic Crew (Charlie Walsh, Jennie Wiacek, and special guests Courtney Viall, and Adrienne Leppold)



## Warblers Galore!

Posted in [Petit Manan 2011](#), tagged [Black-throated blue warbler](#), [Island](#), [Maine](#), [Passerines](#), [Petit Manan](#), [Spring migration](#), [Warbler](#) on May 29, 2011

Petit Manan Island is a great place to watch spring migration as birds travel through the Gulf of Maine heading northward – many of them on their way to breeding grounds in boreal forest, taiga, and tundra habitats. We've sighted many exciting migrants in the past few weeks, especially warblers including: American Redstarts, Black-and-white, Yellow-rumped, Common Yellowthroat, Magnolia, Wilson's, Yellow, Blackburnian, Black-throated Green, Black-throated Blue, Blackpoll, and Chestnut-sided Warblers. The fog has been heavy for the past few days, so many of the birds that stopped over on the island have delayed their departure, which means we have had extra time to view these distinct, colorful avian wonders. The Black-throated Blue Warbler pictured has been fastidiously feeding on insects at the north end of the island for at least three days now while waiting for the weather to break. The migrating passerines have kept us on our toes and the binoculars glued to our faces. Stay tuned, we have a full season ahead!



Black-throated Blue Warbler fluffs his feathers

## Petrelfied!

Posted in [Metinic 2011](#) on May 28, 2011



Leach's Storm Petrel I found in the Tern colony 2010. Notice the tube shaped nostril on top of the beak.

Our first research post is about one of the more elusive species nesting on Metinic. Leach's Storm Petrels belong to the tube nosed Order *Procellariiformes*, and are related to Shearwaters and Albatross.



Petrel burrow found under a piece of driftwood near the south cove. Yellow flags are used to mark and number the burrows.

Most of you have never seen one of this species before, it's even difficult for us researchers to see one without night vision, though they are living underneath our cabin! That's right, not only do Leach's Storm Petrels nest in burrows underground, but they are nocturnal!



Petrel burrow under old stone wall. With the number of cracks and crevices, smell is the only option for identifying a burrow in use.

So how do find a bird that isn't above ground while you're awake? THEY SMELL!!! Imagine a mix between moth balls and old books... My reaction was precious the first time I was told we would be finding burrows by smelling holes, but to be honest, you will smell a burrow before you see it.



Jennie smelling for Petrels despite finding a Garter Snake on her 4th hole. She puts Indiana Jones to shame!

Usually burrows will be under a large stone or tree to prevent collapse or compression. Luckily the old stone walls on the island provide excellent nesting habitat, and many of the Petrels choose to burrow under them. We were able to find 53 burrows in just one afternoon, and the smell was stuck in our noses for the rest of the day.

Satisfactorily congested,

Metinic Crew (Charlie Walsh, Jennie Wiacek, and special guests Courtney Viall, and Adrienne Leppold)

### What a pleasant surprise!

Posted in [Metinic 2011](#) on May 26, 2011



We had an unusual visitor on the island yesterday, a Northern Gannet! This handsome fellow let me walk right up to him and take his picture! (I think he heard about the blog.) Expect our first research and recipe posts soon!

Stay tuned,

Charlie Walsh, Island Supervisor



## See Ewe Later!

Posted in [Metinic 2011](#) on May 24, 2011



Great action shot by Jennie Wiacek

One of the things that makes work on Metinic unique is sheep. That's right, sheep. The herd of over 100 ewes and lambs is here because the island is shared with private land owners. These "South Enders" are a friendly and helpful group, and we couldn't ask for better neighbors.

As we prepare for the Terns to arrive and settle, few undertakings are as important (or as unpredictable) as the annual sheep round up! These organic lawn mowers do us a great service by managing vegetation height year round, which provides great seabird nesting habitat, but Terns are extremely territorial and will exhaust themselves attacking sheep if they are present in the colony. This is not without good reason; sheep can accidentally step on nests and chicks while grazing.



Shepards, Back Row L to R: Courtney Viall, Brian Benedict, Bill Kolodnicki, Tom Goettel. Front Row L to R: Charlie Walsh, Jennie Wiacek. Not pictured: Michael Langlois.

Playing shepherd on Metinic is not exactly the picture you probably have in your head. There are no dogs, and the field is a hilly thicket of Bayberry bushes. Some of these sheep have very young lambs and they must move slowly, so moving them down the east coastline and beyond the fence is as much a

practice of patience as it is ingenuity. The roundup went off without a hitch this year, thanks to the crew, refuge staff and enthusiastic volunteers.

Happy herding,

Metinic Crew (Charlie Walsh, Jennie Wiacek, and special guests Courtney Viall, and Adrienne Leppold)

## Warblers, Terns, and Sheep! Oh, My!

Posted in [Metinic 2011](#) on May 22, 2011

I know many of you have been waiting patiently for this blog to show its face, and I could not be more excited to be writing for all of you right now. For those just discovering the project's existence, welcome to Metinic Island! This will be a portal for all of you to peer into our lives as seabird biologists, though we hope it won't just be treated as a looking glass. We look forward to your questions, comments, and encouragement as we progress through an exciting season. We will be updating regularly with stories, pictures, and recipes from our cabin in the Atlantic. So keep a close eye on the blog; we already have so much we are waiting to tell you!

Until next time,

Metinic Crew (Charlie Walsh, Jennie Wiacek, and special guests Courtney Viall, and Adrienne Leppold)