# **SUMMER WITH THE SEABIRDS**

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

# Archive 2018 – May, June and July

#### 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 May, 2018**

#### Maryland to Maine

Posted in **Uncategorized** on May 30, 2018

Hi my name is Alex Vidal and I am working on Petit Manan Island this summer. I graduated from the University of Maryland in May 2016 with a biology degree. I have been involved in wildlife research, field work, and management for over five years now. I feel very lucky to have worked in some of the places that I have. I've held jobs in Maryland, Florida, Idaho, Georgia, and now Maine. I've gotten to work with wildlife like seaducks, raptors, and sea turtles. Now I get the opportunity to study some really neat seabirds on Petit Manan Island.

The island is a bit colder than I expected. The average temperature has been around 50 degrees which I am not used to in May. I have lived in remote places before, but not quite like this. PMI is only about 10 acres. It is definitely a unique experience living in a place that you can walk to every corner of in minutes. While PMI is a little on the cool and small size, it is proving to be a really neat place to live. The birds are fascinating and you can't beat the views from the lighthouse. I am excited to spend the summer here and hopeful that our cozy island will warm up just a little.



Our field house at sunset. Photo by Chris Gilbert

The first week was somewhat slow on the island, but with each passing day it seems like we are getting more and more busy. The puffins are hard at work finding a burrow to call their own, razorbills are pairing up, a handful of murres have made an appearance, and the guillemots come in droves every morning. The terns are certainly getting geared up for the summer as well. We are finding more and more of their nests every day. Overall I am very excited for the summer to progress and grateful to have an opportunity to work on this island.



Puffin with nesting material. Photo by Chris Glibert

You stay classy mainland,

-Alex

### Early season in Blue Hill Bay

Posted in Ship Island 2018, tagged Birding, Black-throated green warbler, Common Yellowthroat, garlic mustard, Lion's Mane, Maine Coastal Islands National Wildlife Refuge, MCINWR, Wilson's Warbler on May 25, 2018 Daily bird walks are conducted at 7am, where we identify every bird we observe by sight or sound. So far, we have documented 37 bird species on Ship Island. Below are a few photos of the new species saw this week, including Common Yellowthroat, Wilson's Warbler, and Black-throated Green Warbler.







The last few days we have been intensively pulling garlic mustard. Garlic mustard is an invasive weed that grows in what seems to be large clusters here on Ship Island. We have scoured the island, pulling all of the flowering plants and spraying the base as well as the rosettes with vinegar. Our efforts over the last two days have filled 7 large trash bags.



Olivia pulling garlic mustard

Today, we spent a few hours over on Bar Island to document a shell midden found two years ago. On the island we searched for any sign of mammalian predators, finding very few raccoon tracks and scat. While walking the beach we also found a Lion's Mane jellyfish that had washed up in the tide.



We look forward to the nesting season and hope to find eggs within the next few days!

Your 2018 Ship Island

Crew ~Olivia and Bailey

#### Nick and Nora's Infinite Species List

Posted in Metinic 2018 on May 23, 2018

The first week on Metinic Island is complete, and what a week it has been! We've found the first common eider, black guillemot, spotted sandpiper and savannah sparrow nests. The terns are settling onto the island, and hopefully we'll have our first nests this weekend. And migration is still going strong!



We thought we should introduce ourselves briefly before we get too

distracted telling you about the birds we've seen. Nick began birding when he was 6 years old and has just finished his first year at the University of Maine, where he is studying wildlife ecology and forest recreation management. Nora has spent the last three years at Humboldt State University, CA, where she completed a master's degree in wildlife, studying survival in snowy plovers.



Migration on the island has been spectacular. In the last week, we've recorded 111 species, including 18 species of warbler. Highlights have included a pair of harlequin ducks, cape may warblers, bay-breasted warblers, yellow-breasted chat and male Baltimore oriole. On the morning walk, there can be 20 birds in a single tree, and vireos feeding in the bay berry bushes. It can be deafening to listen to all the birds singing at once. There are times when northern parula, red-eyed vireos, (myrtle) yellow-rumped warblers, and American redstarts are in a single tree.



When we aren't looking at birds, we are working to improve the habitat for the terns. We've caught nine common garter snakes that have been released on the mainland. We catch the snakes and harass gulls in the colony because they prey on tern eggs. As migration continues and the terns begin laying eggs, we look forward to sharing more of our adventures with you!

#### -Nick and Nora





### Familiar Faces and a New Perspective - PMI 5/21/18

Posted in Petit Manan 2018, tagged alcids, biology, Birding, Birds, Black Guillemot, Maine Coastal Islands National Wildlife Refuge, Maine Coastal Islands NWR, MCINWR, National Wildlife Refuge, nature, Petit

Manan, Puffins, razorbill on May 21, 2018









I have been bird watching in Maine for 4 years now. For the past 3 years, I have taken a number of boat trips out around Petit Manan Island (PMI) to see the puffins, razorbills, guillemots, and terns. It had always been so exciting to see the little flying footballs we know and love as puffin skimming by the boat, seeing the razorbills relaxing on the rocks, and the terns making their usual ruckus as they fish around the island. Whenever I was on one of these trips, excitement grew as that beautiful lighthouse became closer and closer. This year, I've made the trip out to PMI once again, but as a field technician for Maine Coastal Islands National Wildlife Refuge. All the familiar faces I loved seeing are back again but now the interactions will be different. Instead of viewing them from the boat like in years past, now I can see them from the top of the lighthouse tower, or from my bedroom window, or in a more intimate manner; from the blinds. It is always an amazing feeling to watch these beautiful birds. Alongside the viewing, I will be interacting with the birds in a whole new way! This year I will assist in the banding of chicks, fledglings and adults so we can monitor the population's survival rates through the re-sighting of these bands. I will also aide in food provisioning surveys to see what the adults are feeding the chicks. I'll be monitoring the hatching and fledgling rates as well. All of the data that will come from these projects ultimately help the biologists here at Maine Coastal Island National Wildlife Refuge make decisions that in turn, will keep these beautiful birds here in Maine.

Thank you all for reading about MCINWR! Till next post,

Chris

### Welcome Aboard Ship Island

Posted in <u>Ship Island 2018</u>, tagged <u>Maine Coastal Islands National Wildlife Refuge</u>, <u>MCINWR</u> on May 18, 2018 We are excited to be coming to you from Ship Island, a 11 acre island owned by Maine Coastal Islands National Wildlife Refuge. The island will be our home for the next three months. We would like to introduce ourselves and share a little about the experiences that have led us here.



Your 2018 Ship Island Crew: Bailey and Olivia

As a Minnesota girl with a passion for wildlife and photography, I am loving the beauty of the Maine Coast! I am excited for the opportunity to be living on Ship Island for the summer, expanding my knowledge and experience as an Island Supervisor. Previously, I have worked with the Kittlitz's Murrelet on Kodiak Island, Alaska – Steller's Eider, Spectacled Eider, King Eider, and Long-tailed Duck in Barrow, Alaska – as well as Bighorn Sheep, Bobcats, and Merriam's Wild Turkey in Custer, South Dakota. I plan to attend graduate school to become a Wildlife Biologist.

#### ~Bailey

This Thursday was the start of many firsts for me. My first field job, my first time living on an island, my first time relying on solar power, and my first time living with no running water. Last summer, I worked as an education intern at Scarborough Marsh Audubon Center located in Scarborough, Maine. While at the marsh, I spent most of my time observing birds and am very excited to expand my knowledge on other bird species. Since arriving on the Island, I have already encountered my first Black Guillemot, Black Scoter, American Coot, Black-bellied Plover and Savannah Sparrow. The terns have been coming back and forth periodically throughout the day, but I am looking forward to them staying their first night with us. I am excited to learn more about these beautiful birds and can't wait to find out what the rest of the season has in store!

~Olivia

## **Archive for June, 2018**

#### The Puffin Post

Posted in Petit Manan 2018, Uncategorized on June 30, 2018

Petit Manan is still booming with babies! Many tern chicks have already hatched (and some are even beginning to get their big kid feathers!) while others are still just entering the world. The crew has begun provisioning studies – watching what the parents bring to feed the chicks. Depending on what types of fish the chicks are being fed, we may be able to better understand why some chicks may not survive, as well as how healthy the local ecosystem is, or if there are signs of overharvesting. So just by watching what a couple dozen chicks are eating, we are given a lot of information!

A few days ago we also completed an entire census of the island. We recorded all tern and laughing gull nests on the island, as well as if the tern nests had been predated on by using the predator sticks we put out in the beginning of the season. We had help from several other biologists from the mainland, giving

us a crew of 11 people over the two day census.

Sadly, we also said our farewells to the PhD student we had the pleasure of working with for the past 3 weeks. She was studying the Laughing Gull colony, and has completed collecting the data she needs. She will be heading back to North Dakota shortly and we all wish her the best with the rest of her research!

The Petit Manan crew will continue adoring the puffins, watching the tern chicks grow up (a little too fast), and skunking each other in cribbage.

Over and out,

Kate



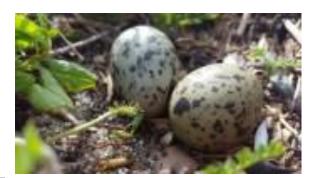
#### The Reality of Seabird Restoration

Posted in Ship Island 2018, Uncategorized on June 28, 2018

As one can imagine, things don't always go as planned when working on a seabird restoration island. The last three weeks have been a whirlwind. All was well and the terns were incubating, when a nasty storm was headed for our little island. A few days before the storm, the terns were leaving the island at night.

We started with night stints, thinking it was a nocturnal predator (eg. Owl, raccoon, or mink). After the weekend, our biologists and staff came out to do a walk-through of the island. Boo, the pup, came out to sweep the island for any sign of mammalian predators. We set several more mink traps, owl traps, and even some raccoon traps on nearby Trumpet Island. The only sign of predation found that day was a dead adult tern. Leaving puzzled, we continued with night walks and checking traps every two hours. With no sigh of a predator, the big storm came with high tides. The terns didn't return after the storm, leaving their eggs exposed to avian predators. The next day we found cracked eggs as well as missing eggs. Soon to see what may be the culprit, crows. We also had a family of geese causing a ruckus, trampling through our colony, destroying nests. Meanwhile, the terns have been coming back at night, staying the night, and leaving in the morning. Again, we did a walk-through, finding three tern feather piles in the rack line. We moved a few of the owl traps and set up game cameras. The island sitter came out for the weekend, finding a new tern feather pile in the rack line on the beach. She saw a Peregrine Falcon and a Merlin early in the morning. During this two week period, colony behavior has not been normal. They have been less and less aggressive towards not only us, but predators as well. Instead of the terns attacking the Merlin, the Merlin was flying with the terns. After this weekend, it seems as if most of the colony has abandoned. However, we have been seeing a few new nests and have confirmation of one. We marked a new one egg nest in one of our productivity plots and the next day there were TWO eggs! At this point we are doing everything we can to scare all predators (eg. Gulls, crows, and eagles) off of the island.







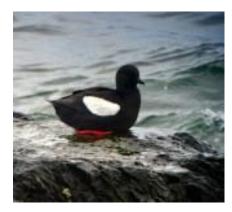
#### Burrowing Into Our Hearts

Posted in Metinic 2018, Uncategorized on June 25, 2018

Our restoration work on Metinic is primarily focused on terns, but we also monitor black guillemot burrows. We locate burrows on the island by watching birds fly in and out of burrows from a blind, and we eventually check those sites for eggs. Black guillemots lay eggs in burrows in rocky crevices and under ledges, which makes it slightly more challenging than nest searching for terns. We have found 34 active nests so far, 15 of which we will monitor for the rest of the season.







We will monitor hatching success, predation and chick growth rate. We selected easily accessible burrows to monitor chick growth because some guillemots are experts at making their nests completely inaccessible. Once there are chicks, we will visit the burrows every few days to measure weight and wing chord of the guillemots to track their growth. Guillemots incubate for 23 to 39 days, and only a few eggs are beginning to show signs of hatch. In our search for active burrows, however, we found one burrow that contained two chicks! As more eggs hatch and we begin to monitor growth we will update you all with how they are doing.

-Nick & Nora



Black guillemot chick on its hatch day.

### **Explosion of Life**

Posted in **Uncategorized** on June 25, 2018

Everything is hatching on Metinic. We've had common eider ducklings for a few weeks now, but all the other eggs are beginning to hatch. On the south end of the island, great black-backed and herring gull chicks are everywhere. Some gull chicks are about 14-18 days old now, so they're reaching their awkward teenage/baby dinosaur stage. Here on the north end of the island we have seemingly hundreds of tern chicks, spotted sandpiper chicks, and we are beginning to see our first black guillemot chicks. Or not see, rather, as they are very good at hiding in their burrows. We've also found a few passerine nests, which also have chicks at the moment.







There are two extremes in terms of how chicks hatch: naked and helpless (altricial) versus covered in down and capable of feeding themselves (precocial). American robin, for example, hatch with their eyes closed and completely naked and require a lot of care to grow all of their feathers while being fed by the parents. On the other hand, spotted sandpiper chicks are capable of running a few hours after hatch, are covered in down and can feed themselves. Black guillemots and our two tern species are semi-precocial: they hatch with eyes open, down and can move, but they rely on their parents bringing food to them.





Just as with their eggs, tern chicks can be variable in natal down color and pattern. Typically, they're tan, brown or gray with dark streaks and splotches that help them blend in with the environment. In some cases there is speckling in the down. However, we have a common tern chick in a productivity plot that is completely blonde with no streaks on the back. It looks more similar to a domestic duckling than anything else, and it is very easy to find! We'll post soon to show you how our chicks are growing!





-Nick and Nora

### Oh Baby! We've Got Chicks! - PMI 6/21

Posted in Petit Manan 2018, tagged Arctic Tern, biology, bird, Birds, Common Tern, FOMCI, Maine Coastal Islands
National Wildlife Refuge, Maine Coastal Islands NWR, MCINWR, nature, Productivity, research, seabirds, tern, Tern
chick, Terns on June 21, 2018

It has been a very busy week for the Petit Manan crew as well as all the tern parents on the island. Our first chicks hatched on June 15<sup>th</sup> and more and more have been hatching each day. These little fluff balls

are absolutely adorable but that cuteness comes at price! Like any good parents, the adults have become very protective of their young and are willing to do anything to ward us researchers off which include pecking us and pooping on us. Now that there are chicks out and about the research team has added on a few more tasks to our days. Every day we must check productivity plots we set up around the islands. These plots are basically giant tern baby play pens each containing 6-15 nests. In these pens we track the hatch date of every egg and track the progression of each chick as they grow. In the end, it will give insight on the entire hatching and fledgling success of the tern colony. We weigh the chicks and also band them; that way, when they start running around we can tell who is who. We also are beginning food provisioning surveys in which we record what the adults are feeding their chicks. We're hoping to see lots of herring, hake, pollock, sandlance! It's a fun time to be on Petit Manan and we're hoping for lots of healthy chicks that grow up ready to migrate down to South America or further this fall.

'Till next post,

Chris











Pictures: Top L to R; Lance weighing a chicks, an Arctic tern chick, an Arctic tern chick sporting some new bands. Bottom L to R; Kate searching the productivity plot for chicks, a tub full of common tern chicks waiting to be weighed

### A Week of Firsts on Ship Island

Posted in <u>Ship Island 2018</u>, <u>Uncategorized</u>, tagged <u>Common Tern</u>, <u>GOMSWG</u>, <u>Spotted Sandpiper</u> on June 15, 2018 This week, we banded our first adult Common Terns, set up our first productivity plots, have our first Spotted Sandpiper chicks, and saw our first Common Eider creche.



We have been busy trapping and banding terns. So far, we have trapped 9 adult terns with 2 recaptures. One banded as a chick on Petit Manan Island in 2009 and the other banded in *Buenos Aires, Argentina!* 



Productivity plots are used to monitor chick productivity. Each plot includes 8-10 nests and is monitored daily until chicks hatch. Once all chicks in the plot have hatched, they are banded and weighed everyother day.







Earlier this week, we conducted the Golf of Maine Seabird Working Group (GOMSWG) survey here on Ship Island. We found a total of 498 Common Tern nests, a few even had 4 eggs!



We cannot wait for our chicks to start hatching!

Your 2018 Ship Island Crew

#### Island life: Long Island to petit Manan Island

Posted in <u>Uncategorized</u> on June 15, 2018

Hello everyone, my name is Lance Edwards Jr. Blogging in from Petit Manan Island, where I will be stationed for the remainder of the summer with 3 other crew members, Kate, Chris, and Alex. They've all been great welcoming me on the island. Their knowledge and experience working with seabird has been helpful for me when identifying and learning about the various birds here on the island, such as the common terms, arctic terns, Atlantic puffins, razorbills, black guillemots, laughing gulls and many more.



As a nutrition major from Long Island university, my experience thus far has been different from what most nutrition majors experience. Everyday holds something exciting, from citing a new bird species, too handling birds, tagging, collecting sample and taking measurements. Field work is so exciting.



My first experience on Petit Manan Island was an encounter with the common terns flying at my head. I thought they were being friendly but that was not the case. An attacking tern flies directly toward a intruders head. And since it's the incubation period, the parents protect their eggs from predators as well as defend a suitable territorial space from neighbors or strangers which intrude on there territory. The terns also enjoy pooping on us which is something we experience everyday.



I will keep everyone updated on my experience here on Petit Manan Island. Till next time.

#### Puffins, and Eiders, and Murres... Oh My!

Posted in Petit Manan 2018, Uncategorized,

tagged chicks, lighthouse, petitmanan, Puffins, refuge, research, seabirds, Wildlife on June 9, 2018 | 1 Comment » Hi everyone! My name is Kate O'Connor and I am super excited to be spending my summer out here on Petit Manan Island. I just finished my second year at the University of Maine studying Wildlife Ecology and this is my first experience working exclusively with birds... and living on an island! But, the island is beautiful, and we have a great crew out here, so it was an easy transition making PMI my home away



from home.

Just recently, we stared fixing up and learning how to use some of the traps we will be using on the terns and Puffins for when we start banding – which is soon! We are finding more and more eggs from all of the birds, and were especially excited about being able to mark our first Guillemot and Razorbill burrows, and see the first Eider chicks swimming around with their momma! We've also been seeing more wildlife, including Common Murres, which haven't historically bred in Maine, and a few seals these past few days which is always an exciting sight.

We've welcomed a
PhD student from
North Dakota onto
the island as well,
who is studying
laughing gull eggs
and chicks, and so
far she's been
getting a lot of work
done – we're very
excited for her!





She's been a great addition to the island and it's always a great time helping her out when we get a chance.

The past few days have been very busy, and there's only more to come. Island life is amazing, and I couldn't imagine doing anything else. The weather is looking clear, sunny, and warm(er), and the crew is having a great time.

~Kate



### A Brief Discussion of Eggs

Posted in Metinic 2018 on June 4, 2018

The breeding season is well underway here on Metinic Island. We've completed breeding censuses for common eiders, and herring and great black-backed gulls. We are also monitoring breeding passerines, black guillemots, Leach's storm-petrels, and common and arctic terns. There is an incredible diversity in eggs, both between and within species. Eggs come in a variety of shapes and colors, which are related to the ecology of the species, nesting behavior and depredation risk. For example, owls lay spherical to elliptical eggs that are whitish to cream colored because they are top predators and mostly nest in

cavities. Owls do not need to disguise their eggs as much as say towhees, which nest on or near the ground.

In avian reproduction, the formation of the shell and addition of pigment occurs just prior to laying. Pigments in the egg shell strengthen it, as well as provide camouflage and other signals. While females of a species typically produce similar eggs, subtle differences between individuals can cause unusual patterns or pigments in eggs.







Many species within a family produce similar eggs either in color, pattern or both. For example, most duck eggs are relatively plain and white to pale green or blue, while the basic pattern in warblers is cream to white with brown speckling. However, other families, such as gulls and terns, show substantial variation between individuals and within a clutch (the group of eggs that a female lays in a single nest). Gull and tern eggs can be pale brown to blue or green, or darker brown or green. There are brown and gray speckles, squiggles or splotches (all very technical terms) that both strengthen the eggs and distinguish them from other eggs.

We've seen a huge variety of color and pattern in herring gulls especially. Most are some shade of brown from pale cream to dark brown. Some are delicately speckled while others have splotches of dark browns. At least one egg was found that had dark speckles around the wide part, and was plain everywhere else. It was like a printer that runs out of ink while printing a picture. Tern eggs can be pale

to dark green as well, but new this year was an almost teal arctic tern egg. The base color with brown speckles make the egg look like a scoop of mint chocolate chip ice cream, but why that egg is so brightly colored compared to other tern eggs.













These eggs show some of the possible variation in bird eggs. Some research has been conducted to understand what directs the shape, coloration and pattern of eggshells. Research suggests that the individual variation may improve nest identification for colonially nesting species, or eggshells may be signals. For example, the depth of blue-green in eggshells may be a result of a higher antioxidant level in females, signaling greater health of both the female and offspring.







Eggs are just one of the many fascinating aspects of avian biology that we get to experience out here. It's an egg-cellent way to study individual variation, health and reproduction in birds.

~Nick and Nora

### One-hundred and Counting!

Posted in Ship Island 2018, Uncategorized, tagged chicks, Common Tern, Great Black Backed Gull, Herring Gull on June 1, 2018

We found our first Common Tern nest, and couldn't be more excited! Since finding our first nest, we have marked over 50 nests and have been monitoring them daily for signs of predation. We have taken note of close to 100 nests in our little colony, while keeping a close eye on any signs of unusual activity that could result in predation. We have been observing more and more terns visiting the colony and spending the night with us.







Yesterday, we headed over to Trumpet Island with refuge staff to conduct a census. While on the island, we walked 3m apart and counted all gull (Great Black-backed and Herring) and Common Eider clutches observed. Not only did we census Trumpet, we also got to observe a Great Black-backed Gull chick hatching!











Although the gull chicks were adorable, we cannot wait for our tern chicks to start hatching!

Your 2018 Ship Island

Crew! ~Olivia and Bailey

#### We will miss ewe!

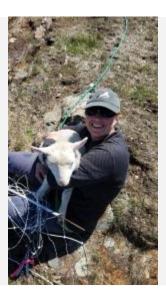
June 1, 2018 by MCINWR

Last week on Metinic, we were working to prepare and execute our sheep roundup. Metinic is home to around 120 sheep, which are owned by a family on the southern end. The sheep move freely around Metinic and control the vegetation from September through mid-May. However, once the terns show up its time for the sheep to head back to their summer home on the south end.



The 2018 Sheep Roundup Crew (photo by Carla Skinder)

Last Monday we, along with some much-appreciated help, set up nearly 0.5 miles of electric fencing to ensure that the sheep don't wander back over to the tern colony. Then next day, it was time for the sheep roundup! After some extensive planning and discussion, our team of 8 armed with walkie talkies, plenty of water and faith in our plan, headed out to restore peace to the north end of the island. After just two hours of mostly smooth sailing, we were able to herd all the sheep from the north end of the island through the fence and on to the southern end. After some well deserved high fives we wrapped things up by adding some brush and a few lengths of non-electrified fencing as deterrents in the intertidal zones.



#### The rescued lamb!



Great minds at work (photo by: Carla Skinder)



Setting up some of the non electrical fencing (photo by: Carla Skinder)

However, sheep are curious and generally not the brightest of creatures. Last Thursday, while surveying the forest, we noticed that two lambs were caught in the non-electrified section of fencing we installed to dissuade them from entering the intertidal. One lamb was able to untangle itself, but the other was more tangled and had to be cut out. The lamb was uninjured and quickly joined its mother, but hopefully has learned to stay away from the fencing. Since then we've had no sheep incursions into the north end of Metinic, and we hope that is true for the rest of the summer!

~Nick & Nora

# Archive for July, 2018

Happy Guillemot Appreciation Day from PMI

Posted in Petit Manan 2018, Uncategorized, tagged Black Guillemot, Maine Coastal Islands National Wildlife

Refuge, MCINWR, Petit Manan Island, PMI, razorbill, tern on July 29, 2018

It has been a week full of change on Petit Manan Island. The majority of terns have fledged and are flying all around the island. It is a rewarding sight to see given that not too long ago, these birds were just eggs in a slight depression on the ground. Seeing all the fledglings combined with the fact that two of our crew members (Chris and Bailey) finished up their duties here on PMI is a stark reminder that the

end of the season is right around the corner. I feel very lucky to have worked with both of these people. Bailey came over from Ship Island a couple of weeks ago and instantly provided a boost to the crew. It felt like we were able to get so much done with her in the squad. Chris has been with me since the beginning on PMI, and it is going to be weird to adjust to island life without him in the crew. His birding skills and overall energy were a key component of our accomplishments this season. They are as smart, dedicated, and talented as they come and they will be missed.



Common Tern fledgling. Photo Credit: Kate O'Connor



The Crew (left to right: Bailey, Lance, Kate, Chris, Alex). Photo Credit: Bailey Yliniemi

While it is a bummer to say goodbye to two crew members, the rest of the crew was excited to observe International Guillemot Appreciation Day this past Friday. We celebrated by grubbing some guillemot burrows, measuring chicks, and banding them if they were old enough. Talk about some crazy festivities. As far as the other alcids go, we have some exciting news. After patiently waiting for them to grow, we finally were able to band our first puffin chicks. It is nice to see them get some big-boy feathers to cover up their down and hopefully they will start to fledge before we know it. We also had our first razorbill chick hatch, which we are all ecstatic about.



Guillemot chicks moments before banding. Photo Credit: Bailey Yliniemi



Chris measuring the wing chord of a razorbill chick. Photo Credit: Bailey Yliniemi

That is all I have for now.

You stay classy mainland,

-Alex

#### Migrating Between Islands

Posted in Metinic 2018, Uncategorized on July 20, 2018

From Ship to Petit Manan and, lastly, to Metinic, I am lucky enough to have been able to experience three of the refuge's seabird restoration islands. Every island so distinctly different from the other, it has been interesting to spend some time on each.

Metinic is such a charming island. I was thrilled to be able to walk in a forest again, and the sheep out here are very cute! There are so many birds on the island a well, and Nora and Nick have been extremely helpful in teaching me about the ones I am unfamiliar with. We have spotted some whimbrels hanging around the island the past few days as well, which was really cool to see.









We have been checking our 86 Leach's storm-petrel burrows that have been marked so far and found chicks in a few burrows! This is the first time a crew has confirmed storm-petrel chicks on Metinic! We have also been monitoring black guillemot chicks, and have done the final check for two near-fledged (~28 days old) chicks. Black guillemots are considered fledged around 36 days old, and these two will be our first to leave their burrow.

As mentioned in the last blog post, the stars out here are unbelievable. I have never seen the night sky so clear and have been enjoying staying up late to see them and listen to the funny storm-petrel calls from under the house. Nora and Nick have been capturing some amazing photos. I will definitely miss seeing the night sky on the islands when I head back to the mainland.

Even though there are a few new nests for terns and guillemots, most eggs have hatched and many chicks have fledged. Our season is wrapping up too, but we still have plenty of final checks, banding and measurements to be taken. It will be sad to leave the island, but the chicks are fledging and birds are leaving on migration so it's time for us to migrate too.

- Olivia

#### New team, new chicks on PMI

Posted in **Uncategorized** on July 14, 2018



Another eventful week for the research team stationed on Petit Manan, as we delved into puffin burrows. Puffins are professional architects when constructing their burrows. Each burrow was different from the

next, a cozy home for the adults and the chicks to live in for the season. Some were easily accessible while others were out of arms reach, literally. It was hard grubbing work trying to find them, while the turns flew over head pooping on us. But This experience is one I will never forget as worked along side puffin adults, which are a lot stronger than I expected and puffin chicks, which make your heart melt. The puffin chicks are looking very healthy and fluffy, and continue to grow everyday.



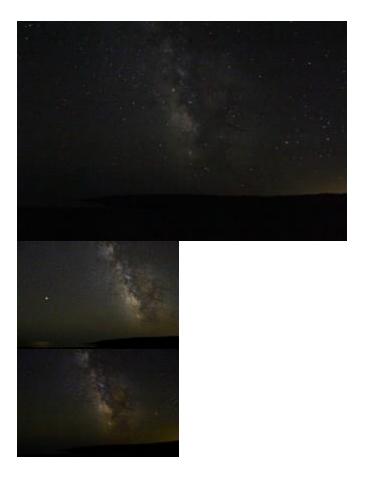
We also added a new member to the team on PMI, Bailey. Before she moved to PMI she was stationed on ship Island. She has been a great addition to the team and we love her presence. Since being on the island Bailey has been able to experience handling puffs for the first time, which is always a special moment.

Till next time 🐇

#### Science Under the Stars

Posted in Metinic 2018, Uncategorized on July 13, 2018

We're busy here on Metinic Island as we monitor chicks and nests for common and arctic terns, black guillemots, and Leach's storm-petrels. While most of our work occurs during the day, some surveys for storm-petrels occur at night. Clear nights on Metinic Island are spectacular because there is no light pollution and few buildings to hinder our view. We can easily see planets, but there are seemingly thousands of stars and the Milky Way cuts across the sky. Lately, the Southern Delta Aquarid meteor shower has begun and several stars are especially bright or close to planets. We are lucky to have such incredible views of the stars.



Unfortunately, many people living in major cities and suburbs rarely see the stars, or may see planets occasionally. In Nora's home town near Los Angeles, CA, only Saturn and Jupiter are usually bright enough to be seen through the light pollution and smog. It's a disheartening feeling to see no stars, and feel no connection with the universe. Light pollution severely limits what is visible, such that some people may never truly see the sky.





Light pollution is growing worse in many areas, but there are a few things that can be done to reduce light pollution and regain views of the stars. First, reduce the number, brightness or view of outdoor lights that are used at night. Second, reduce the number or brightness of streetlights. Third, encourage businesses to turn off or lower lights on their properties at night. And, finally, add fixtures that point light downward. Not all of these will be possible everywhere, obviously, but it seems vital to be able to see the night sky.