

# The Wrack Line



Newsletter of Parker River National Wildlife Refuge • Newburyport, MA

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## Deputy Refuge Manager Frank Drauszewski Retires After 24 Years

by *Alix McArchie, Volunteer Refuge Naturalist*

Frank Drauszewski retired from the Parker River National Wildlife Refuge (PRNWR) on April 29, 2016 following twenty-four years as Deputy Refuge Manager. The interests, enthusiasm, and high energy level that made Frank so well suited to his career at the PRNWR are equally well suited to his retirement plans. Frank is building — hands on building — a cedar log home in Vermont's Northeast Kingdom across from a lake where he will continue his fishing and boating interests. Frank's new home in Vermont is near Jay Peak where he and his family will continue to ski, hike, backpack, and explore, as he has done since his youth.

Frank knew his direction from an early age listening to his uncle Tony tell stories of fishing all over the world. Uncle Tony had a strong influence on Frank's subsequent interests. He took Frank fishing on Long Island Sound for blue fish. It was with Uncle Tony

that Frank shared the excitement of Opening Day of the fresh water fishing season, a start even more joyously anticipated than the start of the baseball, football, and basketball seasons, all sports in which Frank excelled at school. Frank's interest in hiking was nurtured by a college teacher who informally lead a hiking class; Frank has since hiked portions of the Appalachian Trail.

While in high school in Bridgeport, Connecticut, Frank lifeguarded on Long Island Sound and on rainy days was allowed to fish for snapper blues. At Western Connecticut State University, he majored in biology with as many field courses in ecology and environmental science as he could find. After graduating from college, Frank headed west exploring, backpacking, and camping. Always on the lookout for employment in his chosen field and realizing he must collect credentials to achieve this, in 1976 Frank enrolled in the National Outdoor Leadership School in Wyoming. This lead to seasonal positions

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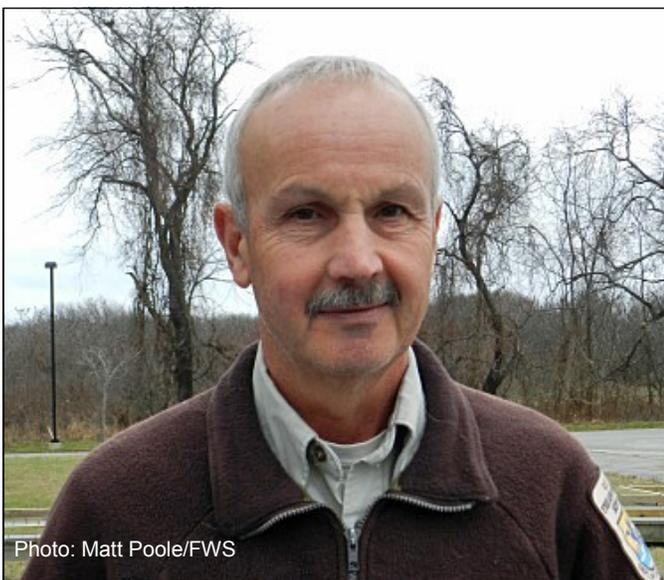


Photo: Matt Poole/FWS

Retiring Deputy Refuge Manager Frank Drauszewski

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## Deputy Refuge Manager Retires

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with the National Park Service and because of his high school lifeguarding experience, Frank began in that capacity at the Cape Hatteras National Seashore on the Outer Banks, a beach renowned for enormous surf and dangerous rip currents. Frank reports that his personal record was ten water rescues in one day. It was at Hatteras that he held his first ranger position. When the season ended, Frank and a friend bicycled across the country to San Diego, all the while being alert for opportunities to apply for federal ranger jobs.

In 1980 Frank successfully landed a position and arrived with his wife, Julie, at Natchez Trace Parkway in Mississippi, a National Park Service unit. This was followed by three years working at Gettysburg National Historical Park where a friend, who had left to work for the Fish and Wildlife Service (FWS), suggested to Frank that this smaller agency might be better suited to Frank's interests. His first FWS position was as a wildlife inspector in the seaports and airports of Louisiana. While Frank loved the state's amazing array of wildlife, birding, canoeing, and fishing opportunities, his position kept him too much in urban areas and after a couple of years the family, now four in number, was off to Florida. (As an aside, life in the National Wildlife Refuge System historically required much moving around. Frank says it was almost expected in order to advance a career and when he and his wife were doing this, his two boys were quite young and undisturbed by it. His sons were about ten years old, give or take, when Frank arrived at the PRNWR.)

The Chassahowitzka NWR in Florida holds some of Frank's favorite career memories. Like many other refuge employees, Frank picked up his law enforcement certification along the way. With his certificate in hand, Frank was charged with the manatee speed zones and harassment complaints in the Crystal and Chassahowitzka Rivers. Most of his days were spent in a boat looking out for the docile ten-foot long, one-ton creatures and protecting them from boat propellers and joy seeking swimmers trying to ride them. Occasionally, Frank would bring an injured animal to a treatment facility. Alligator protection required night work discouraging poachers and on such a night outing happened some of Frank's more dangerous moments, including a high speed airboat

chase and being shot at with the high powered rifles used to kill alligators. The poachers were apprehended, fined, sent to jail, and ordered to forfeit their boat, motor, and trailer. Frank notes, "We were not going to let them get away!" After Florida, Frank and his family headed north, arriving here at Parker River in 1992.

Beyond Frank's many roles at Parker River, he participated in wild land fire suppression, which required having a "red card", a certificate in wild land firefighting. For a couple of years he was a member of both the White and the Green Mountain inter-agency fire crews, traveling across the country to sites in Idaho and Minnesota to fight out-of-control wildfires. Frank sometimes spent 14-hour days, 7 days a week fighting fires and often returned home with a respiratory infection from three weeks of smoke inhalation. Frank reluctantly gave this work up but remembers vividly "thunderheads of smoke; wildfires make their own weather." Frank also enjoyed duck banding experiences in the far off Canadian bush, where he was flown in and out by bush pilot and left to his own devices for the six weeks in between. Supper often depended on his own good fishing skills.

As to the future of our wildlife refuges, Frank sees no great shift in the system's overarching mission to provide habitat for wild species to propagate and prosper in peace; "that is why these lands were set aside and the mission is clearly stated." Encouraging people, all people — young and old, professional and amateur, skilled and novice — to get away from digital screens and into the real world, Frank says, may be more challenging.

By early May, Frank will have vacated his place by the Plum Island Lighthouse and work will begin on the cedar log house in Vermont with the goal of completion before the snow flies. He will make time for the things that matter most to him: canoeing and fishing the adjacent lake, hiking and exploring nearby woods and hills, welcoming and teaching the grandchildren on the joys that await outside. Looking back on nearly twenty-five years at Parker River, Frank says he was "a lucky, lucky, lucky person to be able to do this work." Everyone who has worked at Parker River knows this place was also lucky (times three) for his being here. □

# A Visit with Ben Flemer at the Bird Banding Station

by Matt Poole, Visitor Services Manager

Over the course of a year, we provide refuge volunteers with a range of training opportunities, both formal and informal. A recent training session involved a visit to the bird banding station, which has long been operated on the refuge by our friends at Massachusetts Audubon at Joppa Flats. What follows is an interview conducted with station manager Ben Flemer, who has been running the banding station for many years. Ben provided our volunteers with a wonderful “up close and personal” introduction to the banding station and the work that’s done there. Here’s what Ben had to say:

## **What is the purpose of the banding station and how long has it been in operation?**

The banding station opened in 1998 with its primary mission to study population trends, range expansions, and seasonal movement patterns over time. In addition, we support graduate research of various species by supplying our banding records to the students. Most recently, we provided our banding data to a PhD student at Louisiana State for research into Blackpoll Warbler migration patterns.

Education and outreach is also an important aspect of the banding station. Each year we do demonstrations for school groups from elementary school to college, adult groups (e.g., Lowell Association for the Blind, recently featured on Wilem Lange’s “Windows to the Wild” television program), as well as weekend family visits. We also provide training to students interested in pursuing careers in ornithology and to refuge biology staff. Some of the



The bird banding station. In operation since 1998 and managed by Mass Audubon at Joppa Flats, the banding station is closed to the public.



Ben Flemer, Massachusetts Audubon Society employee and bird banding manager

banding station volunteers include folks like Rachel Wallace, who started in middle school and is now finishing her junior year at Cornell; Libby Natola, who’s now at the University of Lethridge in Alberta, Canada; and Jen Walsh, currently in a postdoctoral position at Cornell and continuing her work on Salt-marsh Sparrows. And then, of course, there are past and present refuge biological technicians such as Kara Moody, Jim Pannacione, Sarah Janson, and Kaytee Hojnacki.

## **When do you operate the bird banding station and how is it staffed?**

We operate the station from April 1 – May 31 and then from September 1 – October 31. In years past, we also banded in August in support of a refuge study examining the effects of invasive species on early fall migrant behavior. I would like to add August, as we get many species that are gone by the end of that month. I’m the only paid staff member at this time. Without our volunteers, it would simply be impossible to run the station!

## **What is the refuge’s involvement at that station?**

In addition to allowing us to band on the refuge through a special use permit, the refuge has begun providing financial support for the fall banding seasons, starting three years ago.

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# A Visit to the Bird Banding Station...

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**How many species of birds have been banded at the station? How many individual birds have been banded over the history of the station? Have there been any particularly interesting captures?**

As of the end of the banding season last fall, we had banded just over 42,000 birds at the station, representing a total of 116 species. There are two types of captures that are interesting. First is what they call a “foreign recovery.” This is a bird that was initially banded at one place and recaptured at a different station. This only happens with two or three birds in every thousand banded; we’ve had four such recaptures over the years: a Saw-whet owl (banded in



Photo: Matt Poole/FWS

Banding a bird. A band with a unique identification number is applied to one of the bird’s legs before releasing it back to the wild.



Photo: Matt Poole/FWS

Bird banding station manager Ben Flemer (left) releases a bird after completing the banding process.

Uxbridge, MA), two Sharp-shinned hawks (one from PA, still waiting to hear back about the second that we just got on Sunday), and a Ruby-throated Hummingbird (banded in Louisiana). The second type of capture is called a “vagrant” and these are birds that do not normally occur in our area. We’ve had a Swainson’s Warbler (south), a Green-tailed Towhee (west coast), an Ash-throated flycatcher, and a Yellow-green vireo (only the second record north of the gulf coast and Florida).

**How many birds are trapped and banded in a given season? I’m guessing the annual total is highly variable from year to year?**

In a typical year we band an average of 1,400 birds in the spring and 1,200 in the fall. Yes, the totals can be variable, especially due to weather constraints. I’m reminded of the Mother’s Day floods of 2006 and the heavy March rains in 2010 that flooded the station.

**Where does all the data go?**

The bands are issued to us by the U.S. Geological Survey. The Bird Banding Laboratory (BBL) in Laurel, Maryland is responsible for the distribution of the bands and the collection/management of the resulting data collected by the banding station. We send our data in at the end of each season. The BBL wants to know the band #, species, age, sex, banding date, banding station location, and status upon release. We record additional information like wing chord, weight, presence of subcutaneous fat, time of banding, net #, and if the bird is molting.

**Over the span of time you have been working at the station, have you personally noticed any particular trend lines, either qualitative or quantitative?**

One that always stands out to me is the Yellow-rumped warbler. Our eastern sub-species is called the Myrtle warbler because of its taste for and ability to digest the waxy fruits of the bayberry (wax myrtle) shrub that is so common to our coastal communities. In some years, the bushes are loaded with fruit and other years very few. In years past, we could always predict a heavy turnout of yellow-rumps if there were a lot of fruit. Now, even in good years, we are not getting the numbers we used to.

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# Meet Volunteer Emmalee Tarry

by Jean Adams, Outdoor Recreation Planner

The Parker River NWR is lucky to have Emmalee Tarry as a volunteer. Before her Sunday morning shift at the visitor center, she typically goes birding for several hours, so that she can provide up-to-the-minute information to birders. Emmalee has lots of great ideas on programs and environmental education, and she's planning to be a roving interpreter on the refuge this summer. Recently, she completed a training slide show on marine animals for other volunteers to use. We love her energy!

## **How long have you volunteered ?**

I started at the refuge in the summer of 2015. For years, I've participated in the annual clean-up day. One year, I took on cleaning up the length of the salt pannes. Boy, did I pick up a lot of trash that day! It even included trash that appeared to have come from boats.

## **What do you do here at Parker River?**

I work the reception desk in the Visitor's Center on Sundays, though I think my real job is to help people enjoy their visit to the refuge and to get them excited about wildlife. Wildlife needs all the help it can get, and when people enjoy a great wildlife experience, they start to care about the future of wildlife, even if that experience is simply watching a Canada Goose. I love it when people come in all excited because they saw a bald eagle or a wild turkey!

## **Any favorite memories that stand out?**

One day a visitor came in and said that he had seen a dead porpoise on the beach. He wanted to know if we had porpoises here at the refuge. Well, I knew it was possible, but I also knew that most people use the term porpoise or dolphin interchangeably, as they really don't know the difference.

I passed along that visitor's sighting to Jean Adams, who found and took a photo of the animal. I then sent the photo to a friend on the Cape, who forwarded it to a professor at Bridgewater State College. The professor later notified Tom French, who came to the refuge to salvage the animal and prepare it for the collection at Harvard's Museum of Comparative Zoology. It turned out that the animal was a Risso's Dolphin, which surprised me because it's a dolphin



Photo: Jean Adams/FWS

Refuge volunteer Emmalee Tarry

we rarely see in the Gulf of Maine. They're usually out on the Continental Shelf Edge, in warmer waters south of the Cape.

Another favorite memory is the time a little boy looked through binoculars and got excited when he saw an eagle, even though it was only a stuffed one! Another time, a hummingbird put on a great show at the feeder right outside the reading room window. Several people were there who had never seen a live hummingbird.

One day, I heard a visitor playing a recording of the wood thrush over and over, so I asked her if she had seen a wood thrush. She apparently had a bird in her yard that sounded somewhat like the wood thrush but not exactly, and it didn't look anything like the picture. So I suggested that she try the winter wren. Not that one either. "How about the Louisiana water thrush?", I asked. Bingo. We were both happy with that one. I love solving such mysteries!

## **Any advice for other volunteers?**

Don't think that you have to know everything about nature or the refuge, and never be afraid to say you don't know. Learn to look up things on the internet. Try to learn something new every time you volunteer. Most important, have fun.

# What is That Masked Bird Buzzing Me at the Beach?

By Linda Schwartz, Volunteer Refuge Naturalist

Least Terns, *Sternula antillarum*, are the smallest of the American terns. They nest in very close proximity to the endangered Piping Plover. Similar to the plover, their nests and chicks are extremely well camouflaged. The main difference is that instead of trying to lure you away from their nest when you get too close as the plovers do, these terns (and many other species of terns) will dive bomb and buzz you when you get too close. If you find yourself getting buzzed, you need to step back from the area to allow the birds to tend to the nest. People getting too close can cause the adults to abandon the nest or you may easily step on the eggs or chicks, they are so well camouflaged.

In addition to nesting on sandy or gravelly beaches, and banks of rivers or lake, the terns will occasionally nest on gravel roofs. Tern chicks leave the nest well before they can fly and if the nest is high off the ground on a gravel roof, this can be a problem. The tar on the roofs can also be a problem on hot days when the hot tar showing through the gravel can



Photo: Linda Schwartz

A Least Tern in flight

burn the chicks' feet or become stuck in their down. The nest consists of a shallow scrape in the sand or pebbles. They nest in open sandy beaches with little vegetation, usually adjacent to shallow pools for them to fish in. As with piping plovers, the placement of their nests leaves them vulnerable to climate change and sea level rise. Their nests are easily destroyed in coastal storms.

The chicks hatch covered in down. Unlike precocial ducklings which leave the nest hours after hatching, the tern chicks are considered semi-precocial as they usually stay in the nest for 3–4 days before they leave. Terns lay 1–4 eggs which both sexes incubate. Incubation is around 25 days and the chicks can fly about 20 days after hatching. The chicks remain with the parents for approximately 2–3 months.

Least terns are distinguished from many of the other tern species, not only by their size, but also by the white patch on their forehead and the yellow beak. Common and Rosette terns both have red or orange on their bills and a solid black forehead. The birds are not sexually dimorphic and both sexes range from 8.3–9.1 inches long, with a wingspan of 18.9–20.9 inches. Weights range from 1.1–1.6 ounces. They have white underparts and a grey back and top of their wings. There is a black leading edge on the tips of their long, narrow wings. They also exhibit a forked tail, when in flight. Like many of the terns, least terns have a black cap on their head, but they

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All Photos: Linda Schwartz

Least Terns in flight and feeding on the beach

# That Masked Bird Buzzing Me at the Beach...

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have a white forehead. They appear to be wearing a black mask over their eyes.

Least terns eat mostly small fish, such as smelt, and some small invertebrates. Like other terns they will dive into the water to catch their prey. This can be quite spectacular to watch; they will dive straight into the water from a distance high above the water. Sometimes they are seen to hover briefly over the water before diving. They usually hunt in shallow water where the small fish are more prevalent. They do not totally immerse themselves in the water when they dive, unlike some larger birds such as osprey or gannets. These graceful birds can frequently be seen diving for food in the salt pannes, as well as along the beaches of the refuge and at Sandy Point.

The coastal population is not considered federally endangered; however, they are a species of special concern in Massachusetts. They are considered threatened, endangered or a species of concern throughout their range, partly because they like to nest on prime beach areas which leaves them threatened by recreation, development, and water diversion that destroys their habitat. Other threats that this species face are high tides from storms that can wash away the nests. Unfortunately, they are on the dinner menu for many predators, both wild and domestic. The young and the eggs are easy prey. In the beginning of the 20th century, terns' feathers and sometimes whole wings were used in the manufacture of hats (millinery). This custom led to the decline of many of the seabirds that nested along the coast of New England. The National Audubon Society and Project Puffin's Dr. Steve Kress have been major factors in the recovery of many seabirds.

The least terns' range includes the southern coasts of the United States and up some of the major river ways into the interior of the country, all the way into the Midwest. The inland populations are the most threatened by habitat loss. Massachusetts is near the northernmost part of their range on the east coast. Least tern populations in the United States are estimated to have declined 88% between 1966 and 2015, according to the North American Breeding Bird Survey. Their current estimated population

on the North American continent is 60,000–100,000 breeding birds, according to the North American Waterbird Conservation Plan.

Least terns migrate to Central America and the Caribbean and Northern South America. There are some breeding populations in Northern South America as well. The least tern typically arrives at its breeding areas in late April. Nesting is usually mid-May to mid-June. Male terns can frequently be seen courting the females with an offering of fish - how romantic!

Like many birds they can be long lived. The oldest least tern on record was at least 24 years old when it was found dead in New Jersey in 1981. It had been banded in Massachusetts in 1957! While it is no doubt an exception for a wild bird to live that long, it is certainly possible. □

## Refuge Welcomes Local Weed Warrior Team

In this year of diminishing staff, the refuge is excited to have more local youth helping with our conservation efforts. Through a partnership with the Gulf of Maine Institute (GOMI), the refuge has hired four interns for the summer. GOMI is a non-profit organization working to develop youth environmental leaders in both the U.S. and Canada. The interns will focus mainly on mapping and pulling perennial pepperweed. With over 500 sites to hand-pull and thousands to map, there's plenty of work to do. They will also be involved in other aspects of refuge research and management this summer and will be working on independent projects of their own.

**Lauren Healey** will be the lead intern on the pepperweed project this summer. She's worked with the invasive species pepperweed in the past with both the Mass Audubon and GOMI and is excited to expand pepperweed treatment this year. Lauren has just completed her freshman year at the University of Massachusetts Amherst, where she double majors in biology and vegetated roof management as part of UMASS's design a major program. She's most interested in biology at the ecosystem level as well as

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# 30 Years of Piping Plover Recovery

by Kaytee Hojnacki, Biological Technician

This year marks the 30th anniversary of the listing of the piping plover under the Endangered Species Act. While being listed isn't something to celebrate, the fact that over these past three decades the U.S. breeding population of the plover has tripled is definitely worth great enthusiasm. Dedicated conservation efforts by a multitude of partners and hundreds of individuals have helped USFWS reach this goal. These partners include federal, state, and town agencies, NGOs, many private landowners, and numerous volunteers. And don't forget all the beachgoers who sacrificed some of the beach so that these birds can nest in peace.

Back in 1986 when the piping plover was listed, there were 140 pairs in Massachusetts. Preliminary numbers from 2015 have the state population at 689 pairs, an almost five-fold increase! The state's population alone has exceeded the New England recovery unit goal of 625 breeding pairs the last four years. Connecticut and Rhode Island also hit a record number of pairs in 2015. Here at home, we had a single pair on the refuge in 1985, and have now reached over 40 pairs this year (the exact count won't be finalized until later this summer).

New England might have exceeded its recovery goal in terms of number of pairs, but it's important to note that ALL recovery units must reach their established goals before the species can be considered for delisting (see below for units, goals, and current populations). Not only is there a population level

recovery goal, there is also a productivity recovery goal which states that each recovery unit must maintain a productivity of 1.5 chicks per pair for five years in a row. This is to ensure that not only are there currently adults in the population, but that chicks are successfully fledging and adding new individuals to the population. Multiple challenges still stand in the way of these recovery goals including: loss of sandy beach habitat, artificially high numbers of predators due to humans, and disturbances that affect their survival.

In light of both the success of recovery in Massachusetts and the continued need to protect the piping plover, the state of Massachusetts has developed a Habitat Conservation Plan (HCP) to address the squeeze that beach managers and goers are feeling with the burgeoning plover population. The HCP will allow beach managers who have obtained the appropriate permit to ease some of the restrictions currently in place to protect nesting plovers. MassWildlife developed this plan to improve public access along with implementing special conservation measures to benefit the plovers. It is currently under review by USFWS, who will make the final determination whether this plan can be implemented within the state. (Note: The HCP does not apply to federal lands so it will not impact how plovers will be managed on the refuge.) The Massachusetts HCP is an encouraging first step toward a new way of balancing recreational needs with the needs of the piping plover. The future is looking bright. □

**Table 1. Piping plover population status and recovery goals for the Atlantic coast population**

Recovery Unit	Population Recovery Goal	2015 Population	5-Year Population Average	Productivity Recovery Goal	2015 Average Productivity	5-Year Productivity Average
New England	625	920*	867	1.5	1.3	1.16
NY-NJ	575	405	414	1.5	1.43	1.06
Southern US	400	362	349	1.5	1.16	1.10
Eastern Canada	400	179	187	1.5	1.6	1.38
Total		1866	1817		1.37	1.175

\*Totals not finalized; subject to revisions. To meet recovery goals, the goal number must be maintained for 5 consecutive years in each recovery unit. Productivity is the number of chicks per pair that fledge.



# An Old Tool for a Modern Refuge

## Refuge Manager Bill Peterson on Prescribed Fire

by Matt Poole, Visitor Services Manager

Earlier this spring, on a Behind-the-Scenes tour of Great Bay National Wildlife Refuge in Newington, NH, we came to a very familiar field that had taken on a decidedly unfamiliar appearance. Where normally there would have been grasses, milkweed and other wildflowers, I viewed a dark and sooty landscape. Farther on, as we were traveling the forest road on the way to Stubbs Pond, we ran into a handful of yellow-shirted folks who were tending to a small (and very much under control) ground fire under the forest canopy. This type of encounter, while not an everyday occurrence at Great Bay, was a reminder that one of the oldest forces in nature — fire — is also an important habitat management tool on many national wildlife refuges across the country. So, I decided to make “prescribed fire” the topic of an interview with refuge manager Bill Peterson.

### **What’s the goal of using prescribed fire at Great Bay?**

We use prescribed fire when possible, if it’s the most effective wildlife management tool for the job. At Great Bay, we use fire to manage two habitat types: grasslands and “dry site” (sandier soils) forests. In grasslands, fire helps to reduce the grass litter layer to stimulate the growth of desirable wildflowers and grasses, and to “top kill” young trees and brush, which would shade out the grasses and flowers if left uncontrolled. In dry site forests, fire also reduces the leaf and twig litter layer to benefit desired wildflowers and a few desirable grasses. Fires are also gradually opening up the forest by top killing younger trees by scorching the tree bases. For both habitat types, goals are to maintain open habitats and promote the growth of native wildflowers (forbs) — both those that are already growing there and, over time, encourage the dormant seeds of additional species to germinate.

### **Is prescribed fire, as a management tool, used in conjunction with other tools (e.g., mowing, timber harvest, herbicide, etc.)?**

Yes, there are lots of scenarios including burning to make undesirable plants (shrubs, invasives, etc.) more detectable for follow-up herbicide treatments. We will often mow an area to knock down sapling stems and then let them cure over the winter to increase the intensity of a spring burn.



Top: Fire team member using a drip torch

Bottom: Fire team monitoring a prescribed burn

### **Were this spring’s burns at Great Bay successful?**

The grassland was very successful as evidenced by the mosaic of mostly top-killed brush with smaller patches of brush that was not top killed. Consumed ground litter was pretty good, too. It’s still a little early to quantify the forest burn success, but consumed ground litter looked good. We burned 15 acres of grassland between Woodman Point and the site of the former Margeson Estate. We also burned 17 acres of oak forest along McIntyre Rd.

### **Is there a schedule for prescribed burns at Great Bay?**

Yes, every 3–4 years for grasslands. We’re burning dry site forests every 3–4 years, too, because we’re in the restoration phase, but we’ll burn the forest sites less frequently (every 5–10 years, depending upon biological conditions), when we enter the habitat maintenance phase.

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# Refuge Manager Bill Petersen on Prescribed Fire as a Refuge Tool

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**Does a densely populated area, like that surrounding the Great Bay refuge — complete with an active airport — make conducting prescribed burns more complicated?**

Yes, we give them [airport officials] plenty of advance notice and burn when smoke will be blown away from the airport (over Great Bay), so they have plenty of time to chart flight paths for circling planes that avoid the smoke. Also, our burns are brief and produce a relatively small volume of smoke, so no prolonged inconveniences for them.

**What type of work needs to be done before a prescribed burn can be conducted?**

We mow fire breaks where needed, but will often use roads for breaks. Under the conditions in which prescribed burns are permitted (non-red flag days), the wet site hardwood forests don't burn. There is a lot of preparation including annual safety training



Photo: FWS

Monitoring a prescribed burn



Photo: Matt Roole/FWS

A field at Great Bay after a recent prescribed burn

and physical qualifications for the burn crew; writing detailed burn plans that identify acceptable temperature, relative humidity, and wind speed directions for burns; notification of local fire departments, airports, 911 dispatch centers, etc. so they're aware that smoke is from a prescribed burn; and multiple layers of approving fire staff on the burn day to review weather and planning and approve or disapprove prior to igniting the burn.

**Who's in charge of prescribed fire planning and execution? Who helped with the recent burns?**

New for 2016, and due to limited wildfire suppression and prescribed fire program funding being sent to New England, the National Park Service (NPS) and U.S. Fish & Wildlife Service (FWS) have combined programs into a single, joint fire program. The North Country/New England Zone Fire Management Officer Tony Davis, transferred to Acadia National Park from Mark Twain National Forest in Missouri. The NPS contributed more towards Tony's position and his crew than did the FWS, so Tony is based at Acadia. Tony and approximately 10 "red-carded" (wildland firefighter certified) FWS staff from Maine, Massachusetts, and Rhode Island assisted with the burns. Newington Fire Department personnel were present to observe and learn about prescribed fire management.

**When compared with other regions of the U.S., what is unique and/or particularly challenging about using prescribed fire in New England?**

Smoke management is more challenging due to the abundance of airports, busy roads, and residences near prescribed burn units. Also, because New England wildfires are infrequent and easily suppressed, there are fewer wildland fire control experts (who are also prescribed fire experts), when compared with out West or in the South.

**Have you personally experienced instances where the local public is concerned about or, perhaps even totally against, prescribed fire? How have you (or would you) address such concerns?**

Not here in New England. In other areas, where large-scale destructive wildfires occur, sometimes people can be more anxious around any wildland fire. Conducting burns cautiously, with safeguards, and exhibiting a high degree of professionalism throughout the burn crew can go a long way toward lessening concerns among the local public. □

# Refuge Welcomes Local Weed Warrior Team

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the cellular level. Her biggest passion is vegetated/green roofs; i.e., roofs covered in plants. After researching green roofs for three years during her science fair project, she's become enamored with their benefits and hopes to design, build, and research green roofs as part of her future career. Her favorite environmental project in high school was creating a public green roof display at Newburyport's Crow Lane Waste Facility.

"I also love being outdoors," she says. "I am always ready for anything active whether it's backpacking, biking, or gardening. So far, the internship has been a perfect fit for me. I'm able to be in the field, gain research experience, and help the environment."

**Jake Shactman** says he is excited to be a part of the pepperweed intern team. This fall he will be going into his sophomore year at UMASS Amherst where he is studying environmental and water resource engineering. He hopes to combine a technical education from the classroom in the field of science and engineering and forge this with his natural sense of conservation to ensure a sustainable future.

"Growing up in Newburyport, I have spent most of my summers on the water —boating, fishing, and exploring what this great area we live in has to offer," he says. "This close tie I have to the water led me to take on conservation and outreach efforts within the Gulf of Maine Institute while in high school, where I lead water quality and bacterial monitoring throughout the Merrimack River."

"Being able to represent both GOMI and the USFWS this summer is a very exciting. I'm looking forward to increasing my involvement on projects I'm familiar with such as the pepperweed mapping and pulling. I am also looking forward to learning more about the other projects that go on behind the scenes at the Parker River Wildlife Refuge."

In high school, intern **Chris Orlando** was involved with GOMI and participated in various environmental projects in the area, including pepperweed control. Chris is from Newburyport and studying to be a mechanical engineer at Manhattan College in New York, where he will enter his junior year this fall.

"I'm interested in helping to preserve the salt marsh habitat, and I look forward to doing field work on many refuge projects," he says. "For GOMI, I did a lot of pepperweed pulls and mapping, but I also worked on projects involving water quality in the Merrimack River and tidal energy mechanisms along the coast. I also represented Newburyport on the Eight Towns and a Bay Committee, which was a great experience in learning how to reach out the community and encourage people to become involved with the projects going on the area."

"Being at school in New York for the past two years, I've lost touch with many of the projects I was involved with in high school, so I'm excited to be working again with pepperweed and other projects at the refuge. Working in the salt marsh will be a great experience for me, and I am looking forward to learning a lot from my work this summer."

**Anna Springfield** is familiar with invasive species due to past years working on the refuge as a member of the YCC (Youth Conservation Corps). Although mainly focusing on pepperweed pulling, other projects may be worked on, as well and she is very excited to learn more about piping plovers and other species that live in this area.

Anna recently graduated from Marshwood High School and will be a freshman at Siena College in New York this fall. She'll be majoring in biology with a minor in psychology, and is very interested in starting her studies and activity involving biology even before she begins her college experience. "My ultimate goal is to be an anesthesiologist," she says, "however, I've always been interested in environmental biology, too. I've participated in fish sampling, and went on many deer surveys with my dad when I was younger, and I always thoroughly enjoyed the experience. This is an amazing opportunity, and I am thrilled to see what comes this summer, and how this impacts me as a growing person, and student."

Besides our four GOMI interns, we're thrilled to welcome back biological technician Kaytee Hojnacki for two more years. Kaytee is the lead on plover conservation and will be lending her expertise to many projects. We're also in the process of hiring an invasive species coordinator. □



## “Let’s Go Outside!” Event a Big Success!

The refuge held its second annual **Let’s Go Outside!** event on a very sunny (and windy!) Saturday in late June. Our goal was to provide kids and adults with an opportunity to “try out” a range of fun and healthy outdoor activities. Below are some images that capture the essence and energy of the day-long event.



### Photos, clockwise from top.

Biological technician Kaytee Hojnacki instructs a youngster in the finer points of archery.

Plum Island Kayak, along with refuge volunteers, running the very popular kayaking activity at Hellcat.

Refuge volunteer Mary Saunders offering interpretation while folks view a barn swallow nest with a spotting scope.

Federal Wildlife Officer Gareth Williams on the refuge beach teaching kids how to surf fish.

Ellen Goettel once again hosting her popular “tide pool critters” exhibit in the visitor center at parking lot 1.

Kids try their hand at taking pictures of flowers at the photography activity station. They were also given the opportunity to photograph a great horned owl, an American alligator, a porcupine, and a snapping turtle!

A father and son enjoying a chance to kayak in the North Pool.

Refuge volunteer Lynette Leka providing information about the purple martin nest colony at parking lot 1.

All photos by Matt Poole/FWS unless otherwise noted.

# Goodwin Camp Slated for Removal

*by Matt Poole, Visitor Services Manager*

Back in April, officials at the Parker River National Wildlife Refuge (NWR) announced that the last remaining summer cottage (or camp) lying within the refuge boundary will soon be removed. The aging two-story structure, known variously as “The Anchorage” or “Goodwin Camp,” is located on the western tip of Stage Island, in an area known to many local residents as the Ipswich Bluffs.

Prior to the establishment of Parker River NWR in 1941, human activity on the southern portion of Plum Island — the same area now occupied by the refuge — was primarily limited to the warmer months. A number of seasonal cottages once dotted the landscape. Gradually, as the U.S. Fish and Wildlife Service (USFWS) acquired properties to form the new wildlife refuge, existing structures were removed and the land allowed to return to a natural state. In a few instances, properties were acquired as “life estates,” meaning that the original owners were allowed continued use of their cottages for the

remainder of their lives, after which the USFWS would assume full control of the property. Such was the case in 1944 when the UFWS purchased the Goodwin Camp from then owner Dorice Knowles Goodwin. Mrs. Goodwin passed away in 2011.

The removal of the structure has been approved by both the USFWS’s cultural resources office and the Massachusetts State Historic Preservation Officer. Following an environmental review, a contractor was hired to remove asbestos-containing materials from the structure.

The legacy of the Goodwin Camp will continue in a very interesting way. The refuge has awarded a contract to a local vendor who dismantles old structures and converts the reclaimed, useable wood into furniture and other home furnishings.

Future plans call for establishing a new trail that will allow refuge visitors to walk to the tip of Stage Island, an area on the refuge with unparalleled natural beauty. □



Photo: Matt Poole/FWS

The Goodwin camp, located on Stage Island, is the last remaining summer cottage on refuge property.

# A Visit to the Bird Banding Station...

*(Continued from page 4)*

Some of my older volunteers who have been birding Plum Island for a long time say they have noticed a drop in the number of “fall out” days in May.

## **Does 18 years of data collection at the PI banding station suggest anything about the state of song-birds?**

I think the deck is really stacked against them on all fronts! Whether it's habitat loss on breeding and wintering grounds, lack of suitable stopover habitat during migration, all of the human made obstacles that they have to contend with, or simple apathy on the part of the public, they are in need of some serious help. Think of the population of Magnolia warblers that will breed across the boreal forests of Canada and then winter in the Central American country of Costa Rica, the Bicknell's Thrush that only nest above 3,000 feet in New England (prime ski area sites) and winters primarily in the forests of the Dominican Republic (you won't find a stick of wood in Haiti), or the Eastern Towhee, a ground nesting bird of shrub/scrub habitat that is under great development pressure. The refuge is protected and so we still have a vibrant population, but they are much less common in unprotected areas where increased housing densities attract more meso-carnivores such as skunks and raccoons, as well as our favorite subsidized predator, the domestic cat. You need only look north from parking lot 1 to see what it looks like. You sure won't hear a towhee there!

## **Can you tell me a little about your background? What led you to work at the banding station?**

When I went to college right out of high school, I found that I didn't like it and it didn't like me, so I took some time off and “got the wiggles out” so to speak. I enrolled at the University of Idaho in Moscow in 1995 and got a degree in Wildlife Resources Management and was at an age when I was seriously interested in learning. I found myself particularly drawn to my botany and ornithology classes, and they offered many opportunities for summer internships between school years. My first banding experience was at Lucky Peak (now Inter-mountain Bird Observatory) near Boise, ID the fall after I graduated. They ran a songbird migration station during the morning, hawk watch and hawk trapping in the late

morning and afternoon, and Saw-whet and Flammulated owl banding at night. It was the best introduction that I could have hoped to have. I was referred to Bill Gette and started working at the refuge banding station, from the fall of 2002 to the spring of 2003. From there, I went on to work at Manomet from the fall of 2004 to the fall of 2005. I returned to Mass Audubon in 2007 and started at the banding station in the fall.

## **How does one become a bird banding station volunteer? What experience or training is required?**

We offer a banding workshop each season as a requirement for volunteering. It consists of an evening lecture and a five hour station visit. I usually waive that requirement if someone is already experienced or a starving college student interested in gaining a new skill set! □



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