# THE SHOREBIRD RESEARCH PROGRAM — AN INTERIM REPORT

**By H. Thomas Bartlett, Thomas Kashmer, and Keith Norris**

This year, 2012, was the seventh of this research project. The principal sponsors are the Winous Point Marsh Conservancy, Ottawa National Wildlife Refuge, the Ohio Chapter of The Nature Conservancy, Black Swamp Bird Observatory, Ohio State University, and Willie and Terri McClure. Ohio State University graduate student Keith Norris was still on board from previous years and leading the charge. Through the first six years the project has gone from a study of which shorebirds were using the marshes, to an avian flu study, to now a more in-depth investigation of how migrant shorebirds use the marshes. Through the first six years 6415 individuals representing 27 shorebird species were banded. Banding occurred on 205 days over those six years, and only during fall. A total of 7581 net hours of effort resulted in 0.85 shorebirds banded per net hour.

This year marked the first attempt at banding during spring shorebird migration. An intern, Kendra Carter from New York, was hired to assist Keith in this study. During the spring study, Tom Bartlett and Tom Kashmer had little time to help, so Keith and Kendra did most of the work. Over the course of the spring migration, banding was conducted over 29 days with 736.5 net hours of effort. A total of 359 individuals of 12 species were banded for a ratio of 0.49 shorebirds banded per net hour. This is below the fall season average and we do not yet know the reason for the lower number. In addition, only four individuals were recaptured during the spring season. This may be due to the fact that birds are moving through the area faster in the spring than in the fall and so don't spend much time in the area. As during the fall 2011 work, several of the more common migrants were color-marked to aid in identifying them without recapture.

The 2012 fall season began the first week of July and ended on November 6 with a total of 54 banding days. Technician Justin Bosler was added to the fall season team to replace Kendra Carter, whose internship had ended. Justin worked out very well. July, August, and early September seem to be the peak times for banding, wheras the end of the season is very slow. Weather seems to have a major effect later in the fall with winds picking up and often preventing net setup. Unfortunately, this causes us to miss much of the Dunlin migration. During 2012, banding was conducted 15 days in July, 21 days in August, 10 days in September, 6 days in October, and 2 days in November. The team handled 2024 birds during this fall migration season. Of these, 1603 individual shorebirds of 18 species were banded. During the 1843.75 net hours of effort we banded 0.87 shorebirds per net hour. In addition, we banded 116 individual non-shorebirds representing 19 species. We recaptured 213 shorebirds, 84 individuals (mostly non-shorebirds) were released or escaped before banding, and there were eight casualties (0.44% of birds handled). The 1603 shorebirds banded is our second highest season (we banded 1661 in 2009) and the 1843.75 net hours was the second most for a season (2067.5 in 2011). The 0.87 shorebirds banded per net hour is close to the 0.85 average for the seven years of this study.

One of the 18 shorebird species banded this fall was new for the study: On 30 Jul Tom Kashmer captured and banded a Ruddy Turnstone in the Metzger Unit of Winous Point. It was our 28th shorebird species banded during the course of the project. Six species of shorebirds were banded in record numbers this fall. They were Killdeer (177), Solitary Sandpiper (27), Greater Yellowlegs (7), Lesser Yellowlegs (135), Pectoral Sandpiper (324), and Wilson's Phalarope (2). Only one species was banded at a historically low number: The three Stilt Sandpipers were far below the seven-year average of 13.

One of the major purposes of this study is to look at stopover time and weight change during stopover. Keith's work will examine this subject in much greater detail and be published at the end of his time with the study. This year we had numerous recaptures of note, both of birds previously banded by us and also of birds banded elsewhere. Several of the "foreign" recoveries were significant. A Short-billed Dowitcher we banded on 21 Jul 2008 was recovered near Fort Myers, Florida on 22 Dec 2011. A Semipalmated Sandpiper we banded on 20 Jul 2008 was recaptured twice, on 23 and 25 Jan 2012, by banders near the Bay of Turiacu, Maranhao, Brazil. A Hudsonian Godwit we observed at the mouth of Crane Creek in ONWR had a green band over a metal band on one leg and a red flag on the other leg; it had been banded on 21 Jan 2010 near Chiloe Island, Chile! A Dunlin we banded on 27 Oct 2009 was killed by an airplane at an army base near Beaufort, South Carolina on 08 Nov 2012. And finally, a Wilson's Snipe we banded on 29 Aug 2012 was collected near Reidsville, Georgia on 08 Dec 2012. In addition, we recaptured several shorebirds which we had banded in previous years. Sixteen Semipalmated Sandpipers from previous seasons were recaptured, one of them twice. Three had been banded in 2008, 5 in 2009, 4 in 2010, and 4 in 2011. A Least Sandpiper banded in 2011 was also recaptured.

We recaptured 158 of the shorebirds banded this season, some of them more than once for 199 total recaptures. The average time between banding and recapture was seven days and the average weight change was a positive 2.4 grams. They represented nine species: Semipalmated Plover (5 individuals), Killdeer (9), Spotted Sandpiper (1), Solitary Sandpiper (1), Lesser Yellowlegs (2), Semipalmated Sandpiper (55), Least Sandpiper (66), Pectoral Sandpiper (18), and Dunlin (1). Numbers that may be significant are for Semipalmated Sandpiper (average stay 5.9 days and average weight change plus 2.7 grams), Least Sandpiper (average stay 7.9 days and average weight change plus 1.7 grams), and Pectoral Sandpiper (average stay 7.3 days and average weight change plus 4.9 grams). Again, Keith will examine the data in greater depth at the end of the study.

We try to keep records of the species observed at the study sites in addition to the individuals captured and banded. 2012 appeared to be a down year for species diversity and numbers. As was done last year, several species were color marked at the time of banding or recapture in order to better study the movements of the birds while they are in the area. Keith will have a report of those results as well. This year we recorded 22 species of shorebirds at our banding locations (note that we banded only 18 of them). In the past we have regularly recorded closer to thirty. The lack of shorebird diversity at the sites this season is unknown. The color-marking of shorebirds is showing that there is greater mobility among the various shorebird sites than we realized.

# FALL 2012 OBSERVATIONAL RECORDS

| **Species** | | **Aug2** | **Aug 3** | **Aug 6** | **Aug 7** | **Aug 9** | **Aug 12** | **Aug 12** | **Aug 12** | **Aug 13** | **Aug 15** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | WPSC Met | WPSC Met | WPSC Met | WPSC Met | McClures | McClures | WPSC Met | So. Creek Bay | McClures | McClures |
| Black-bellied Plover | 1 | | | | | | | | | | 1 |
| American Golden Plover | 1 | | | | | | | | | | |
| Semipalmated Plover | 1 | 2 | 3 | 10 | 5 | 1 | | | | 1 | |
| Piping Plover | | | | | | | | | | | |
| Killdeer | 1 | 25 | 35 | 24 | 20 | 50 | 30 | 3 | 6 | 20 | 11 |
| Black-necked Stilt | | | | | | | | | | | |
| American Avocet | | | | | | | | | | | |
| Spotted Sandpiper | 1 | 3 | 2 | 1 | | | 1 | | 2 | 1 | |
| Solitary Sandpiper | 1 | 7 | 14 | 4 | 7 | 5 | 5 | 2 | 2 | 4 | 4 |
| Greater Yellowlegs | 1 | 2 | 3 | 4 | 6 | 5 | 10 | 1 | 15 | 8 | 15 |
| Willet | | | | | | | | | | | |
| Lesser Yellowlegs | 1 | 6 | 10 | 15 | 13 | 85 | 70 | 2 | 75 | 50 | 60 |
| Upland Sandpiper | 1 | | 3 | 1 | | | | | | | |
| Whimbrel | | | | | | | | | | | |
| Hudsonian Godwit | 1 | | | | | | | | | | |
| Marbled Godwit | 1 | | | | | | | | | | |
| Ruddy Turnstone | | | | | | | | | | | |
| Red Knot | | | | | | | | | | | |
| Sanderling | | | | | | | | | | | |
| Semipalmated Sandpiper | 1 | 18 | 14 | 75 | | 12 | 1 | | 12 | 12 | |
| Western Sandpiper | 1 | | | 1 | | | | | | | |
| Least Sandpiper | 1 | 12 | 24 | 40 | 20 | 40 | 15 | 3 | 45 | 24 | 10 |
| White-rumped Sandpiper | 1 | | | | | | | | | | |
| Baird's Sandpiper | | | | | | | | | | | |
| Peeps? | | | | | | | | | 50 | | |
| Pectoral Sandpiper | 1 | 8 | 15 | 25 | 15 | 250 | 125 | | 25 | 105 | 50 |
| Dunlin | | | | | | | | | | | |
| Stilt Sandpiper | 1 | | | | | | | | 15 | | |
| Buff-breasted Sandpiper | | | | | | | | | | | |
| Short-billed Dowitcher | 1 | | | 8 | | 6 | 1 | | 50 | 4 | 5 |
| Long-billed Dowitcher | | | | | | | | | | | |
| Wilson's Snipe | 1 | | 1 | | 1 | 2 | 2 | | 2 | 2 | 1 |
| American Woodcock | 1 | 1 | | | | | | | | | |
| Wilson's Phalarope | 1 | | | 2 | 3 | | 2 | | | 2 | 5 |
| Red-necked Phalarope | 1 | | | | | | | | | | 1 |
| Red Phalarope | | | | | | | | | | | |
| **TOTAL SPECIES** | **22** | **10** | **11** | **13** | **9** | **10** | **11** | **5** | **11** | **12** | **11** |
| **TOTAL INDIVIDUALS** | | **41,207** | **41,248** | **41,337** | **41,218** | **41,586** | **41,395** | **41,144** | **41,432** | **41,367** | **41,299** |
| **Other Notable Species** | | | | | | | | | | | |
| Trumpeter Swan | 1 | | | | | | | | | | |
| Hooded Merganser | 1 | | | | | | 8 | | | 6 | |
| Double-crested Cormorant | 1 | | | | | | | | 25 | | |
| Least Bittern | 1 | 1 | | | 2 | | | | | | |
| American Bittern | 1 | | | | | | | | | | |
| Great Blue Heron | 1 | | | | | | | | | | |
| Great Egret | 1 | | | | | 30 | | | 40 | | |
| Snowy Egret | 1 | | | | | | | | | | |
| Cattle Egret | 1 | | | | | | | | | | |
| Black-crowned Night-Heron | 1 | | | | | | | | 45 | | |
| Peregrine Falcon | 1 | | | | | | | | | | |
| Sora | 1 | | | | | | | | 1 | | |
| Common Gallinule | 1 | 1 | | | | | | | | | |
| Sandhill Crane | 1 | | | | | | | | | | |
| Caspian Tern | 1 | | 12 | | | | | | 6 | 75 | |
| Common Tern | 1 | | | | | | | | | | |
| Forster's Tern | 1 | | | | | | | | | 8 | |
| American Pipit | 1 | | | | | | | | | | |
| Dickcissel | 1 | 5 | 3 | | | | | | | | |
| Bobolink | 1 | | | | | | | 1 | | | |
| Grasshopper Sparrow | 1 | | | | | | | | | | |
| **Time** | | 0500-0930 | 0500-1200 | 0500-1200 | 0500-0930 | 0500-1100 | 0500-0930 | 1000-1100 | 1030-1100 | 0500-0930 | 0500-1100 |
| **Observers** | | 2 | 9 | 5 | 3 | 4 | 5 | 3 | 3 | 3 | |
| | | | YCC | | | | | | | | |

**SITES:** **Winous Point Shooting Club**
WPSC-Met (Sandusky County)
WPSC-Horseshoe (Ottawa County)
South Creek Bay (Sandusky County)

**Ottawa NWR**
Unit 2A (Ottawa County)
Moist Soil Unit 5 (Lucas County)
Crane Creek Estuary (Lucas County)

**McClure Marsh (Sandusky County)**

# FALL 2012 OBSERVATIONAL RECORDS

| Aug 16 | Aug 18 | Aug 20 | Aug 21 | Aug 23 | Aug 24 | Aug 28 | Aug 30 | Aug 31 | Sep 4 | Sep 4 | Sep 6 | Sep 17 | Oct 1 | Oct 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WPSC Met | McClures | McClures | McClures | McClures | McClures | McClures | McClures | McClures | McClures | ONWR Estuary Mouth | McClures | McClures | McClures | Crane Crk Estuary |
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| 5 | 15 | 30 | 50 | 40 | 40 | 20 | 25 | 25 | 30 | 75 | 45 | 35 | 25 | 50 |
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| 1 | 12 | 10 | 15 | 16 | 20 | 8 | 5 | 12 | 30 | 10 | 3 | 2 | 3 | 12 |
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| 4 | 55 | 70 | 100 | 50 | 75 | 70 | 30 | 25 | 90 | 75 | 30 | 2 | 6 | 28 |
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| | 35 | 50 | 75 | 25 | 30 | 250 | 100 | 40 | 50 | 25 | 10 | 2 | | 1 |
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| 10 | 60 | 125 | 65 | 50 | 50 | 120 | 60 | 40 | 120 | 70 | 45 | 12 | 8 | 4 |
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| 9 | 75 | 85 | 115 | 50 | 105 | 250 | 125 | 75 | 150 | 25 | 35 | 15 | 10 | 39 |
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| | 8 | 3 | 2 | | 1 | 1 | | | 4 | 35 | | | | |
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| | 1 | 1 | 1 | 1 | 4 | 3 | 7 | 2 | 4 | 2 | 1 | 2 | 4 | 1 |
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| **7** | **11** | **10** | **11** | **9** | **13** | **13** | **10** | **9** | | | | | | |
| **41,170** | **41,430** | **41,534** | **41,582** | **41,382** | **41,496** | **41,891** | **41,521** | **41,385** | **41,648** | **41,519** | **41,332** | **41,240** | **41,239** | **41,390** |
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| 50+ | | | | | | | | | | | | | | |
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| 0500-0900 | 0500-1130 | 0500-1130 | 0500-1130 | 0500-1100 | 0500-1100 | 0500-1230 | 0500-1100 | 0500-1030 | 0530-1100 | 1200-1300 | 0530-0930 | 0630-1000 | 0630-1000 | 0630-0930 |
| 3 | 50+ | 3 | 5 | 3 | 3 | 3 | 5 | 2 | 3 | 1 | 3 | 3 | 3 | 3 |
| | OYBC | | | | | | | | | | | | | |