

Hitchcock Nature Center Hawk Watch and Banding, Fall 2010

Mark Orsag

Solid steady numbers across the entire season, of early, mid-, and late season migrants made 2010 the 2nd best season in the history of Hitchcock Nature Center Hawk Watch (HNCH) with a total of 11,961 migrant raptors of nineteen species counted. Approximately 816 hours of counting time were logged between 15 August and 20 December. The season's passage rate for migrating raptors was 14.7 raptors per hour. New season records were set for Turkey Vulture (4,366), Bald Eagle (1,126), and Peregrine Falcon (69). New single-day records were set for Peregrine Falcon (28) on 20 September and Rough-legged Hawk (14) on 12 December. Of the nineteen raptor species annually counted at Hitchcock, above average (as defined against the eight season HNCH full coverage average) counts were posted by seven species (Turkey Vulture, Osprey, Mississippi Kite, Bald Eagle, Golden Eagle, Merlin, and Peregrine Falcon). Essentially average (-/+ 10% in comparison to the 8-year HNCH average) counts were posted by six species (Northern Harrier, Sharp-shinned Hawk, Cooper's Hawk, Red-tailed Hawk, Rough-legged Hawk, and Ferruginous Hawk). Below average counts were posted by six species (Northern Goshawk, Red-shouldered Hawk, Broad-winged Hawk, Swainson's Hawk, American Kestrel, and Prairie Falcon).

THE SEASON IN DETAIL

August and September

Observers manned the watch on only four days in August before full-time counting

commenced on 1 September. On 29 August, a strong push of Turkey Vultures (109), tacking as usual into southerly winds, produced a rare triple-digit day (113 total raptors) for August. September featured many south wind days and few strong fronts. This didn't seem to depress raptor numbers, however, as the Loess Hills and Missouri River Valley offer by far the most efficient pathways over the midcontinent flatlands for migrating raptors under such circumstances. A steady trickle of birds at the beginning of the month turned into a consistent strong flow beginning on 11 September. During the last 20 days of the month, there were 17 triple-digit flights. While there were no truly spectacular days, the nearly unremitting push of raptors made September 2011 the third best September in HNCH history. Count totals topped the 400 mark four times. On 22 September, 347 Turkey Vultures dominated a 458 raptor flight that also featured 58 Sharp-shinned Hawks and 12 Ospreys. This was the first of a series of big flights two days apart. On 24 September, one of the few reasonably strong frontal systems of the month pushed through 538 raptors, among them 136 Turkey Vultures, 168 Broad-winged Hawks, and a lone Mississippi Kite. Turkey Vultures (203) predominated again on 26 September leading an 11 species, 425 raptor flight. Right on the "every other day" schedule, on 28 September, 142 Turkey Vultures and 118 Swainson's Hawks led a 13 species, 453 raptor flight that also included two very late Mississippi Kites.

October

October included more cold fronts and generally followed the steady pattern of good flights that emerged in September. The first 13 days of the month all witnessed triple-digit raptor flights. Nine more triple-digit flights occurred during the rest of October; October 2011 was the third best October in HNCH history. Flights of 400 or more raptors occurred on 2, 10, and 26 October. On 2 October, 237 Turkey Vultures and 114 Red-tailed Hawks dominated a 10 species, 436 raptor flight. The best flight of 2011 occurred on 10 October with 284 Turkey Vultures and 233 Swainson's Hawks comprising the bulk of an 11 species, 631 raptor flight. On 26 October, 320 Red-tailed Hawks and 76 Bald Eagles led a nine species, 451 raptor flight that also included a lone Golden Eagle.

November and December

November began slowly with a relatively mild and inactive weather pattern. A series of powerful cold fronts toward the end of the month brought strong totals and produced the 4th strongest November (1,404 total raptors) in the history of HNCH. The big days were 22 November when Bald Eagles (79) dominated a flight of 103 raptors that was accompanied by a stunning total of 600,000 Snow Geese! An even stronger push of Bald Eagles (121) along with 2 Golden Eagles highlighted a flight of 201 raptors on 25 November. Two more Golden Eagles showed up the next day (26 November) during a flight of 120 raptors that was dominated by Red-tailed Hawks (85). November 30 saw yet another strong push of Bald Eagles (117) as part of a six species, 171 raptor flight.

Despite frigid temperatures, December was a disappointing month with only two flights of 50 or more birds. On 1 December a flight of 81 raptors of five species was evenly divided between Bald Eagles (45) and Red-tailed Hawks (33). A brutally cold, windy day on 12 December, preceded by a snowstorm the day before, produced 76 Bald Eagles, 30

Red-tailed Hawks, and a HNCH single-day record of 14 Rough-legged Hawks. After that flight, the season sputtered to a close with only 33 southbound raptors recorded during the last eight days of the watch.

SPECIES ACCOUNTS

Black Vulture (0). The last Black Vulture seen at Hitchcock was in 2005. Only one other sighting has occurred at HNCH—in 2002, the last year before full-time counting commenced. After the 2005 sighting, we began to hope that this species might be more or less regular (if not annual) at Hitchcock. At least at this point, that doesn't appear to be the case.

Turkey Vulture (4,366). The 2010 season was a record for Turkey Vultures with the count a whopping 35% above the HNCH average. With southerly winds predominant in the early to mid-season, flight conditions were favorable because these big birds love to tack into the wind. They were afforded plenty of opportunities to do so in 2010. September was the top month as these birds moved a bit early this season. The top day of the season for Turkey Vultures (347) was on 22 September, a day characterized by steady moderate (around 15 mph) southeasterly winds. The timing of the peak flight was a bit early. The last Turkey Vulture was recorded, a bit late, on 11 November.

Osprey (182). Ospreys (which are strongly pre-frontal migrants at HNCH) and Turkey Vultures are both early season migrants that like to tack into southerly winds at HNCH, and it is thus not surprising that Ospreys also had a very strong showing in 2010. The 2010 fall total was nearly a new season record, falling just short of the HNCH record total of 184 (2004). The 2010 flight was 46% above the 8-year HNCH average. September was, as always, the top month with the peak flight of 34 occurring, with normal timing, on 20

September—a pre-frontal day characterized by moderate to strong (around 20 mph) southerly winds. The last Osprey was recorded on 28 October.

Mississippi Kite (12). The 2010 season was good for Mississippi Kites at HNCH. This season's total was 38% above the HNCH average. All the kites recorded this year were seen in the month of September. The first appeared on 1 September with the last two seen on 28 September. Both 6 September and 28 September tied for the peak flight with two kites counted on each of those days.

Bald Eagle (1,126). These late season migrants, strongly post-frontal and favoring north winds, were recorded at an unusually brisk pace throughout the 2011 season at HNCH—a surprising total of 66 turned up in September and a stunning 249 were counted in October. The 2010 count, which was a new HNCH season record, was a whopping 32% above the HNCH average. November was, as usual, the top month with 614 Bald Eagles recorded. The peak flight (121) occurred with normal timing on 25 November with the rapid passage of a low pressure system that brought moderate to strong (20+ mph) northwest winds in its wake. The first two Bald Eagles showed up on 6 September. Rivers and lakes in the vicinity froze during an extended time period this fall but were all closed by the end of the season on 20 December. We also experienced an excellent Snow Goose flight down the Missouri River Valley this season. These two factors probably helped boost Bald Eagle totals considerably.

Northern Harrier (279). While 2010 wasn't a good season for harriers at HNCH

(particularly following a record setting year in 2009), it wasn't notably bad either. The 2010 count was just 3% below the HNCH average. The timing of the flight was very much on the late side, however, with November (77) actually beating the September total of 56. October (140) was, as usual, the top month. The shallow peak flight of 19 occurred somewhat late on 4 November, a day marked by the passage of a robust Pacific cold front that produced 20+ mph NNW winds. The first two southbound harriers were recorded, with normal timing, on 1 September. The last southbound harrier was recorded on 6 December.

Sharp-shinned Hawk (1,070). This was another species coming off a record showing in 2009. The 2010 total, however, was just 2% above the 8-year HNCH average. Migration was a bit early with September the top month. The first Sharp-shinned Hawk was recorded on 2 September. The shallow peak flight of 79 occurred slightly early, on 21 September, with the passage of a weak Pacific cold front that produced light to moderate (10 mph) NW winds and cloudy conditions. These very small, naturally buoyant raptors seem to prefer days where the winds and the lift (from thermals or updrafts) are not too strong. This presumably saves them a good deal of buffeting and allows them to expend less energy. Thus, their 2010 migration peak at HNCH on a gloomy, damp day with only light winds and 100% cloud cover is not unusual. Such a pattern would be unusual for almost every other annual raptor at HNCH, except perhaps for the highly adaptable and unpredictable Northern Harrier.

Cooper's Hawk (242). The Cooper's Hawk was yet another species that posted a record season total in 2009. The 2010 total was about 3% above the HNCH average. This species shows less annual varia-

tion than many others at Hitchcock, and the timing and volume of the unremarkable 2010 flight was consistent with that pattern. September was, as always, the top month for Cooper's Hawks at Hitchcock. The peak flight of 2010 (25) occurred, with normal timing, on 24 September; this flight occurred with sunny skies and moderate (15 mph) westerly winds following the passage of a low pressure system the night before. These conditions created good thermals, updrafts, and nice ridge-riding opportunities for the day's Cooper's Hawks. This species is an annual breeding and wintering resident at Hitchcock Nature Center, so I have not included any early/late data.

Northern Goshawk (5). While the 2010 total was 17% below the HNCH average, this represented a difference of just a single bird—5 versus the average count of 6. This is an uncommon raptor at HCNH. The first goshawk of the season was seen quite early on 17 September. The last migrant was recorded on 27 October, although a bird was later found at Hitchcock during the DeSoto NWR Christmas Bird Count in early January 2011. October was the top month for goshawks. The peak flight of 2 occurred on 21 October, a calm sunny day with excellent thermal conditions and light and variable winds.

Red-shouldered Hawk (4). The 2010 Red-shouldered Hawk total was 20% below the HNCH average, although this represented only one bird (4 birds versus the average of 5). This is a very uncommon species at Hitchcock and the season record is only 8 birds (2004). The first Red-shouldered Hawk was seen on 24 September with the last counted on 17 October. All four birds seen in 2010 were singles, so there was no peak flight.

Broad-winged Hawk (579). The 2010 flight was 17% below the HNCH average,

although as I have noted in past reports this is somewhat deceiving. Without the huge outlier of the Hurricane Katrina influenced 2005 flight (which is more than 700 birds above the next highest season total), the 2010 flight would be well above average. In 2010, the first Broad-winged Hawk was seen on 19 August, and the last a bit late on 10 October. The peak flight of 168 occurred with normal timing on 24 September, a day with sunny skies, good thermals, and moderate updrafts. Only one dark morph Broad-winged Hawk was counted this fall.

Swainson's Hawk (693). The 2010 total was 42% below the HNCH average but actually was the best showing at HNCH in the last four years. It was a heartening experience, and for some of our more recent volunteers a new one, to see kettles of these raptors again. The first Swainson's Hawk was seen on 26 August, and the last two were counted on 11 October. The peak flight (233) occurred, with very late timing, on 10 October, a sunny, unremarkable day with light and variable winds and good thermal conditions. A weak low pressure system induced falling barometric pressure readings throughout the day but no other effects were visible. Five dark morph and three rufous morph Swainson's Hawks were recorded in 2010.

Red-tailed Hawk (3,096). This season's total was 9% below the HNCH average. Flight timing was average with October, as always, the top month. The peak flight of 320 occurred a bit late on 26 October. This was a day when a strong Pacific cold front brought howling WNW winds, gusting to 50 mph, a typical peak day for Red-tailed Hawks. They are mid- to late season, updraft favoring, post-frontal migrants. The following Red-tailed Hawk color morphs/subspecies were recorded this year: 42 Har-

lan's dark morph, 2 Harlan's light morph, 10 Krider's, 16 Western dark morph, 5 Western rufous morph, 1 partial albino, and 35 birds recorded merely as indeterminate dark morph Red-tailed Hawks.

Rough-legged Hawk (36). An uncommon late season migrant, the Rough-legged Hawk flight in 2010 was 8% above the HNCH average. December was, as usual, the top month. The first two Rough-legs were recorded with normal timing on 31 October. The peak flight, a new HNCH day record, was 14 birds on 12 December. This was a sunny day with very strong NW winds and frigid temperatures following blizzard conditions on 11 December. The combination of the strong cold front and substantial snow cover may have induced these birds to move south. We have noticed a strong correlation between the appearance of snow cover and Rough-legged Hawk migration at HNCH in past seasons, and this was once again the case in 2010. Nine dark morph Rough-legged Hawks were recorded in 2010, 25% of the 2010 flight. This is about average for HNCH and suggests a mix of birds from the eastern and western Arctic.

Ferruginous Hawk (1). After a two season absence, a lone juvenile light morph bird was recorded, with fairly normal timing, on 21 November. This represents an average fall count at of this very rare migrant. The day that brought in the Ferruginous Hawk this year was cloudy with light westerly winds that saw an overall count of 92 raptors. This was the second day of a fairly strong but slow moving low pressure system. A Prairie Falcon was recorded a few hours before the Ferruginous Hawk. Western hawk migration sites, such as those run by Hawkwatch International, often experience strong flights based around low pressure systems.

Golden Eagle (23). The 2010 Golden Eagle total was 21% above the HNCH average. The whole dynamic of the flight was inexplicably different this year. The first two birds turned up right on schedule on 14 October. This species' baffling propensity for posting a daily count of two birds when it does turn up at HNCH continued strongly in 2010. This happened on six out of the thirteen days that Golden Eagles were recorded at HNCH in 2010. The peak flight of 4 occurred somewhat early on 30 October and October (not November) was the peak month, a surprising break from the traditional pattern with Golden Eagles at HNCH. The last bird moved through on schedule on 2 December. The day of the peak flight was uncharacteristic as well. Generally, Golden Eagles prefer to tack into southerly winds (like a late season version of Turkey Vultures or Osprey) or are pushed through with Bald Eagles and Red-tailed Hawks as ridge riders on blustery cold fronts with strong westerly or northerly winds. The peak on 30 October occurred on a sunny day that saw the passage of a weak Pacific frontal system; prevailing northwest winds were weak to moderate and gave thermalling birds only a slight push southward.

American Kestrel (90). The American Kestrel continued a steady pattern of decline at HNCH in 2010. This fall's count was 21% below average. The best HNCH counts for this species are a decade old now and often came in years when the counting at Hitchcock was only part-time. During the last five seasons, the average kestrel counts are, taken in aggregate, 13% below the current 8-year average. September was the best month this season with the peak flight of 14 on 13 September, a day of light southeasterly winds that were apparently enough to produce perfect flight conditions

for these small buoyant raptors. Kestrels don't mind tacking into light southerlies at HNCH, something that this year's peak flight illustrated once again.

Merlin (62). The pattern of strong flights in recent years for this species at HNCH continued in fall 2010. This fall's count was 29% above the HNCH average. The first and last Merlin were detected on 2 September and 2 December, both normal timing. However, the peak month and flight timing were unusual this year. The peak month in 2010 was September instead of October, although a late peak flight of 7 birds occurred on 27 October. The latter day was a day marked by the passage of a very strong cold front that produced westerly winds gusting to 50 mph and powerful updrafts at Hitchcock. It is a tribute to the amazing flying abilities of these little raptors that they shared the air on that day with numerous Bald Eagles and Red-tailed Hawks, species seemingly much better suited to such conditions.

Peregrine Falcon (69). The 2010 count was a new season record and a whopping 38% above the HNCH average. The first Peregrine Falcon was seen, a bit late, on 12 September. September was the top month. The last Peregrine Falcon was recorded with fairly normal timing on 27 October. The record peak flight of 28 occurred on 20 September, breaking the old record of 22 that was a decade old (Figure 1).

Prairie Falcon (3). Three single birds, all in November, were seen at HNCH this fall. This count was 25% below the HNCH average, but as with the Northern Goshawk and Red-shouldered Hawk, this represented a difference of only a single bird. Typically, sightings of this rare migrant at HNCH are spread out over the October to December period. November is usually the peak month for Prairie Falcons at Hitch-

cock. They also have a habit of turning up on days that aren't exactly raptor-filled (totals of 31, 52, and 92 raptor migrants on 7, 13, and 21 November 2010 respectively). They also turn up, unpredictably, under a wide variety of weather conditions; this too occurred in fall 2010. The first was seen on a day with moderate southerly winds,

the second on a day with strong northwest winds, and the third on a day with light westerly winds.

Unidentified raptor (23). Three unidentified accipiters, two unidentified buteos, two unidentified falcons, and sixteen birds classified only as unidentified raptors were recorded at Hitchcock in 2010.

NONRAPTOR FLIGHT

Hitchcock Nature Center is overflowed by literally millions of southbound birds each fall. Many of these fly at night and others, although day flying, have too complex and confusing patterns for us to count—Canada Geese, Purple Martins and other swallows, American Robins, and icterids are just a few examples of such species. In recent years, we have settled into a pattern of counting eleven species (without the stringent protocols used for raptors) of non-raptors each fall and noting other species of interest. Below are the summaries of those counts for 2010.

Waterfowl, Shorebirds, Wading Birds, and Gulls

American White Pelicans, after several down years, exploded this year at HNCH with a record count of 16,007; 14,834 of these birds were recorded in the month of September. Double-crested Cormorants, on the other hand, showed up in below-average numbers (4,228) this fall. The flight was fairly evenly split between the months of September and October. Great Blue Herons experienced a fairly robust flight with 48 counted this fall. October was the peak month, but two were counted in December! Snow Geese (741,160) posted a huge total largely based on a record 600,000 bird flight on 22 November. Ross's Geese, however, actually posted a below average total of 26. Perhaps the sheer mass of Snow Geese on 22 November, flying in formations described by observers as cloud-like, obscured their smaller cousins. Franklin's Gulls posted disappointing numbers again in 2010 and only 1,618 were counted at HNCH this season. None were seen during the month of October, which is simply bizarre. Ring-billed Gulls were also scarce at HNCH this year. Only 27 were recorded during the 2010 season. Other noteworthy counts included 1,350 Greater White-fronted Geese, 76 Great Egrets, 4 *Plegadis* (ibis) species, and a record 613 Sandhill Cranes.

Corvids and Other Species

A respectable 106 Common Nighthawks were counted this season. Red-headed Woodpeckers posted very poor numbers in 2010, coming after a series of very strong and consistent flights over the past few seasons. This year's count of 122 is about 15% of what we have been averaging the past several seasons. Whether this was due to some meteorological or environmental quirk, or whether Red-headed Woodpeckers in the central United States are starting to follow the declines seen in the eastern United States remains to be seen. Blue Jays, on the other hand, experienced a sustained and robust flight. September was the big month for Blue Jays this season with a total of 6,167, the overwhelming bulk of the seasonal

total of 8,796 Blue Jays. The American Crow flight was a bit disappointing with only 12,371 recorded this fall. For the third year in a row, the Eastern Kingbird flight was paltry with a very poor total of only 19 this season. The lack of hours logged in August probably hurt the total.

Other notable species seen around the hawk tower included Lewis's Woodpecker (a juvenile seen on 10 October was the most surprising bird recorded at Hitchcock in 2010), Belted Kingfisher, Yellow-bellied Sapsucker, Blue-headed Vireo, Tufted Titmouse, Swainson's Thrush, Northern Parula, Yellow-breasted Chat, Summer Tanager, Rusty Blackbird, Great-tailed Grackle, and Purple Finch.



Figure 1. Juvenile female Peregrine Falcon captured for banding at Hitchcock Nature Center Hawkwatch, 24 September 2010. Photograph by Sandy Reinkin

ACKNOWLEDGEMENTS

HNCH couldn't function without the fine staff of Hitchcock Nature Center and the help of our great Hitchcock Hawkwatch Association volunteer group and visitors. Many thanks to Elliott Bedows, the late Fritz Davis, Linda Dennis, Kelly Dix, Dog (official hawk watch dog), Keith Dyche, Ryan Evans (our superb hawk counter), Chad Graeve, Griffin (official hawk watch mascot), Jonas Grundman, Janet Hascall, Richard Hendrick, Stan How, Bill Johnson, Jori Jones, Erin Kenney, Clem Klaphake, Jeanine Lackey, Sherry Leonardo, Lori Lind, Don Maas, Shirley Maas, Sue Mattix, Jason McMeen, Veronica Meckoray, Jim Meyer, Greg Nelson, Babs Padelford, Loren Padelford, Don Paseka, Janis Paseka, Donna Popp, Tina Popson, Sandy Reinken, Dana Ripper, Bob Russell, Tom Schilke, Jim Sinclair, Kent Skaggs, David Spencer, Meredith Spencer, Phil Swanson, Jerry Toll (simply the heart of HNCH), Jayu Yang, and Jean Yang.

Hitchcock Hawk Counter Ryan Evans offers the following tribute to longtime HNCH volunteer Fritz Davis, whom we tragically lost to an accident this fall:

Definitely one of a kind. Not only was he interesting to have on the tower, he was also a very thoughtful and selfless man. When he showed up, he almost always had a treat for me and Dog. Whether it was a recipe, a raptor natural history printout, or anything in between, he was always thinking of others. Even though he had a full load himself, he would always try to carry some of my stuff up the tower. I remember my last day with him well. Knowing that I was a Huskers fan, he brought a small portable radio up to the tower. He

had been at Hitchcock most of the day, and around 4 P.M. he left the banding station. But Fritz did not go home. He came back up on the tower, and the two of us listened to the rest of the game together. Even though they lost, it was great to be up there listening to the game as the last of the raptors came through for the day. I hope that I will always remember that. A great man to share space with...

Raptor Banding at Hitchcock Hawk Watch, Fall 2010

Jerry Toll

Raptor Banding Efforts

The diurnal banding season began favorably on 2 September when the mist nets were opened for the first time. A Merlin quickly flew into the net and became the first capture of the season. The capture rate remained well ahead of last year's record until the third week in October when it slowed. An extreme low pressure system with westerly winds brought numerous raptors (mostly adult Red-tailed Hawks), but they stayed west of the banding station and could not be lured to the trap. The capture rate dropped precipitously after late October and stayed low for the remainder of the season. We ended the season with 157 captures, slightly below last year's record of 164. Of this total, 107 were Red-tailed Hawks, of which 81 were juveniles. Other frequently captured species were 29 Sharp-shinned Hawks (12 males and 17 females) and 18 Cooper's Hawks (7 males and 11 females). We did not recapture any previously banded diurnal raptors this season. In addition to the Merlin, two other species were banded. On 14 September, a Broad-winged Hawk flew into a mist net without any human encouragement. It was early in the day and apparently flew from its perch and was attracted to the starling lure. This was the first Broad-winged Hawk banded at Hitchcock. It is unusual to capture this species in migration because they hunt from the perch and are not usually lured. On 20 September, there was an amazing push of Peregrine Falcons when 28 flew past the hawk watch in mid- to late afternoon. Of those 28 individuals, 12 were attracted to the pigeon lure and made close, low passes but were not captured. Still, every Peregrine pass at the lure, just a few feet from the observer, was exciting! It was an extraordinary day. On 24 September at around 9 A.M., I had begun luring and looked down for some reason. When I looked up there was a Peregrine in the mist net! Despite the bander's best efforts, most of our success is largely determined by the behavior of the individual bird, a reminder of humility and respect. All of the Peregrines that have been seen from the banding station or captured have been of the *tundrius* subspecies. The last capture of 2010 was on 14 November, a Red-tailed Hawk, but full coverage at the banding station ended on 31 October.

Northern Saw-whet Owl Banding Activities

The nocturnal banding season of Northern Saw-whet Owls began at HNCH while we were still banding diurnal raptors on 8 October. Because of the intensity of the banding season, we restricted our nocturnal banding to four hours beginning after sunset, four evenings per week. We banded 25 evenings during a 46-day period and the owl-banding season ended on 21 November. The peak period was 28 October to 9 November (Figure 2). An “L” shaped array of mist nets was used in combination with an audio lure of the female spring call. Consequently, 74.5% of the captures were female, 14.5% were male, and 11% were of unknown gender. It was a successful season with 55 new Saw-whets banded, 4 recaptures of birds banded by others (foreign), and 10 recaptures of owls banded by us during the same season but not in the same evening (domestic). This exceeded last year’s

37 captures and two foreign recaptures. Of the 2010 foreign recaptures, two came from Hawk Ridge near Duluth, Minnesota, one came from a nature center near Milwaukee, Wisconsin, and the origin of the other remains unknown. Four of the domestic recaptures were of one individual, which was recaptured repeatedly over a 22-day period that suggested a nearby territory. Four individuals were recaptured once at intervals of 2 to 16 days from initial capture. Another individual was recaptured twice at 12 and 20 days from initial capture. The nets were open for a total of 96.25 hours which, including the foreign recaptures, yielded a capture rate of 0.61 owls per hour.

ACKNOWLEDGEMENTS

We thank the Pottawattamie County Conservation Board and Foundation for financial, staff and facility support. The Iowa Ornithologists’ Union and Iowa Audubon provided continued financial support. Banding efforts were aided by Sandy Reinken (co-bander) and volunteer banders Carla Ahlschwede, Ruth Bentzinger, Denise Lewis, and Janis Paseka.

21214 McClellan Drive, Gretna, NE 68028 (wordorsag@cox.net)
2741 Wyoming Street, Omaha, NE 68112 (geritol48@cox.net)



Figure 2. Dana Ripper holding a Northern Saw-whet Owl captured for banding at Hitchcock Nature Center Hawkwatch, 7 November 2010. Photograph by Ethan Duke