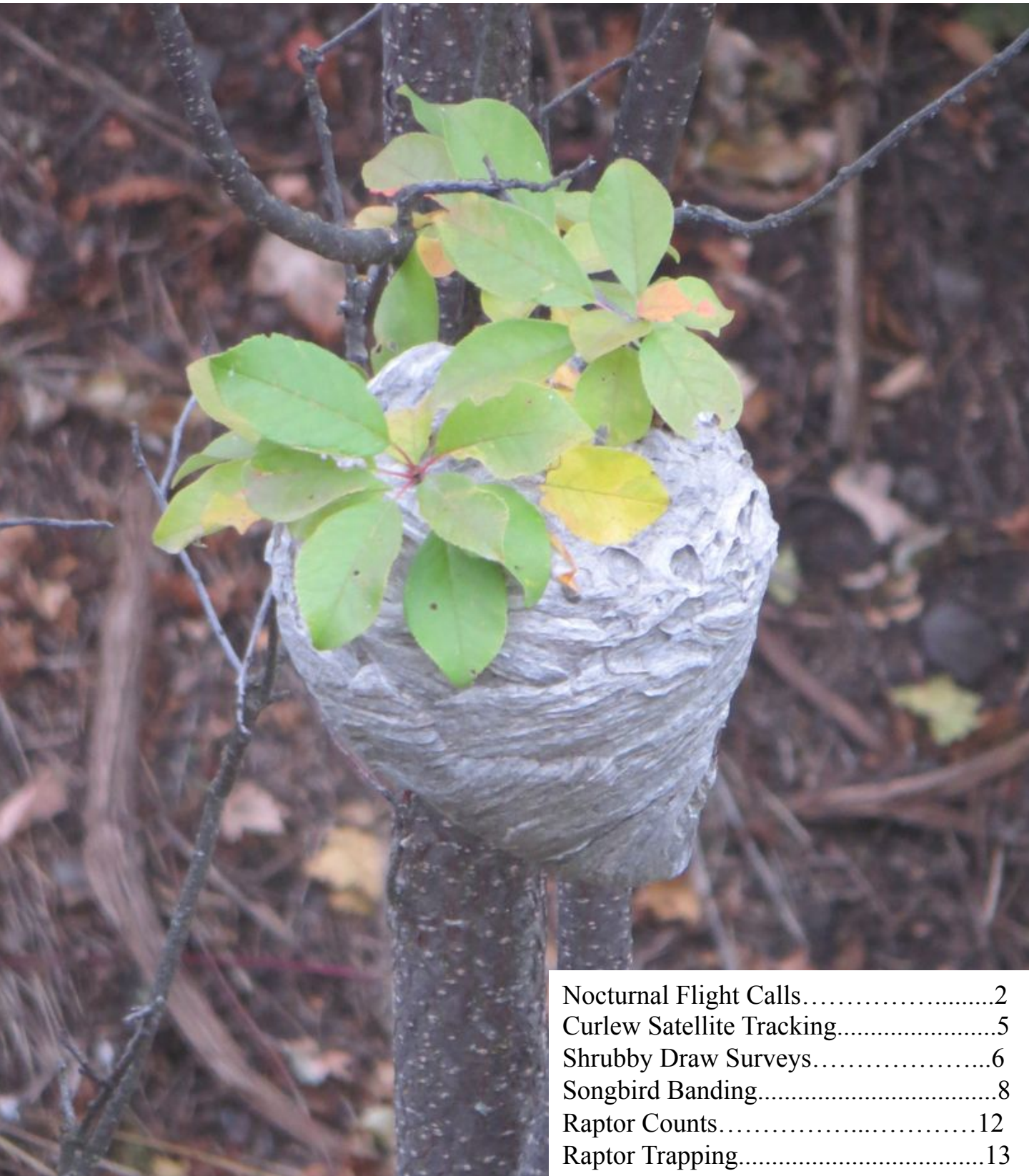


Bird Field Note  
Nocturnal Flight Calls, Curlew Tracking, Raptor Counts,  
Songbird and Raptor Banding  
10/12/14  
Debbie Leick



|                                |    |
|--------------------------------|----|
| Nocturnal Flight Calls.....    | 2  |
| Curlew Satellite Tracking..... | 5  |
| Shrubby Draw Surveys.....      | 6  |
| Songbird Banding.....          | 8  |
| Raptor Counts.....             | 12 |
| Raptor Trapping.....           | 13 |

## Fall Migration Nocturnal Flight Calls September 2013 vs. September 2014

In September 2013 and September 2014, we recorded 579 and 583 nocturnal flight calls from migrating sparrows and warblers (“tseeps”), respectively. Both years, calls peaked in the first week of September. By the fourth week, the number of calls showed a large decrease. We expected calls to decrease during the month; the majority of species that emit nocturnal flight calls migrate before the end of September.

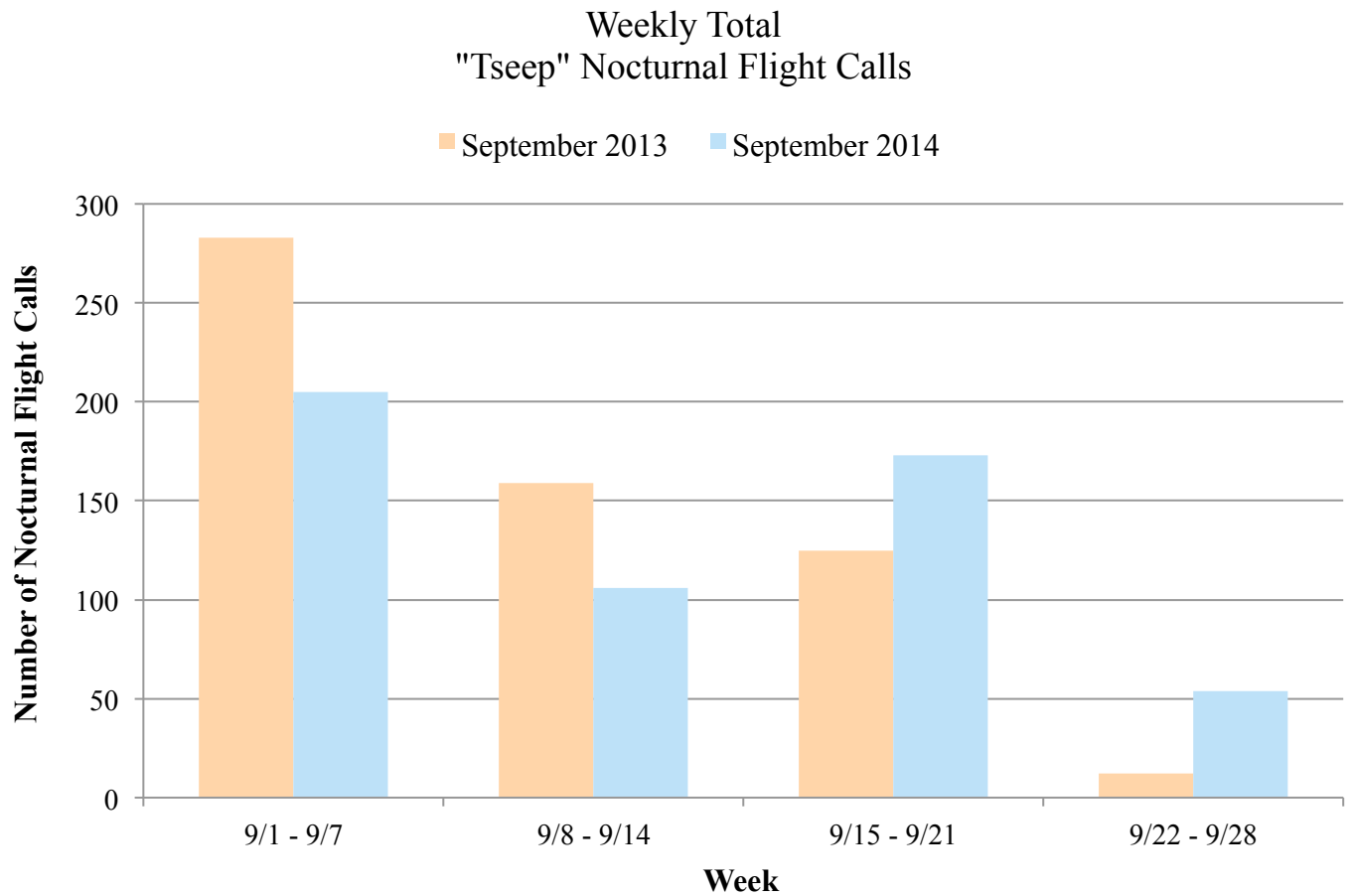
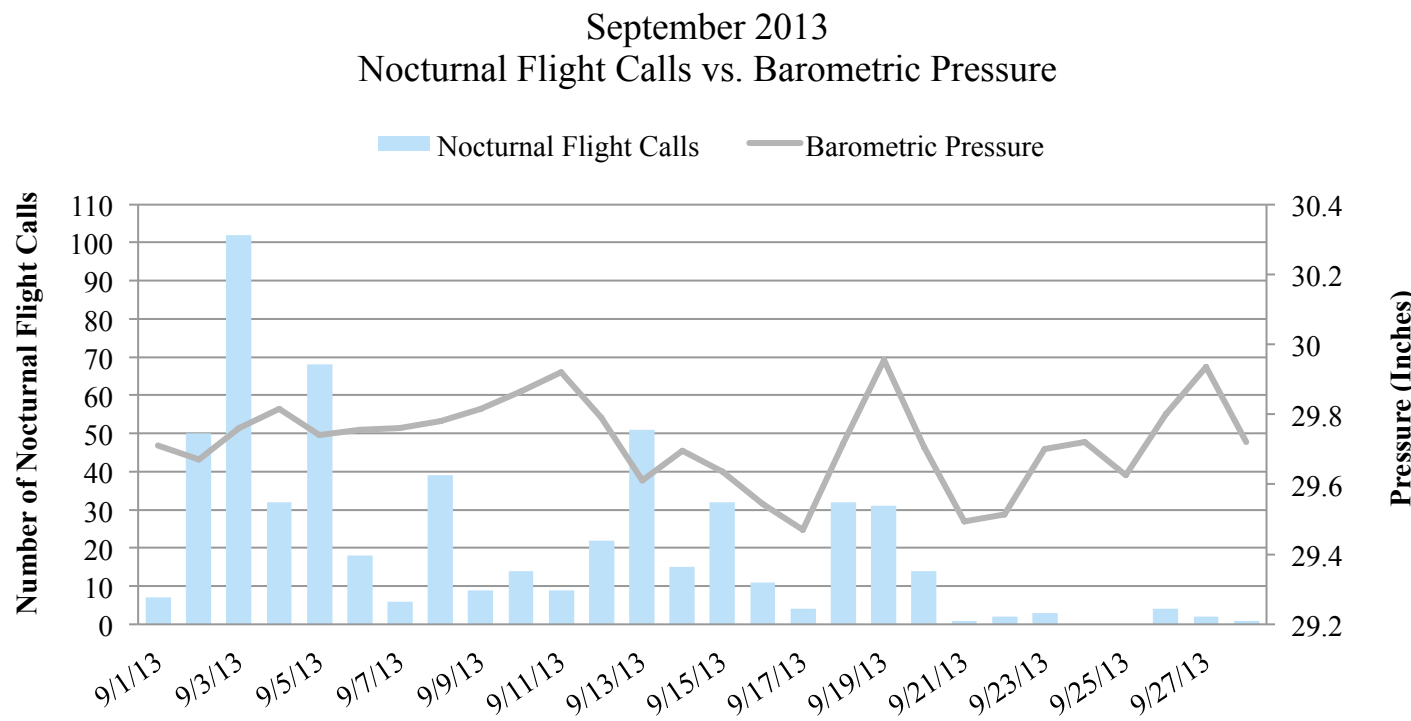
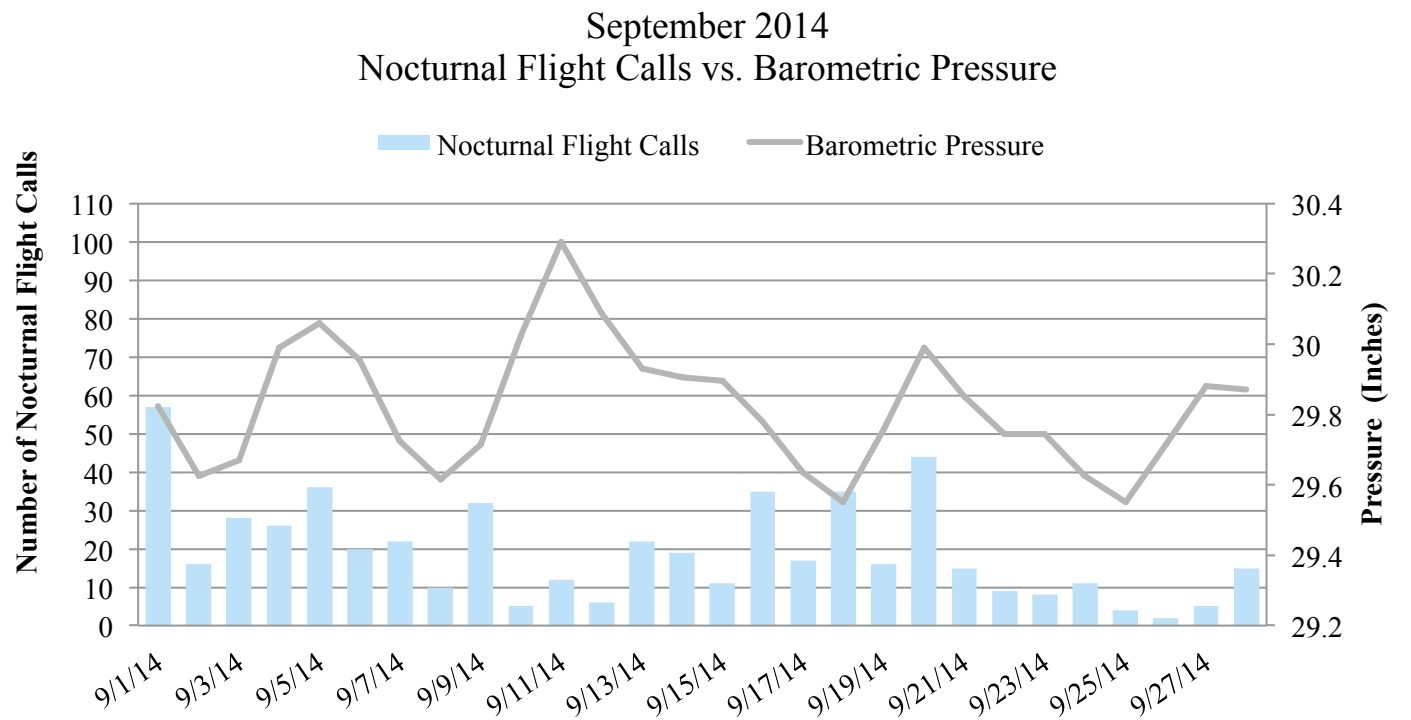


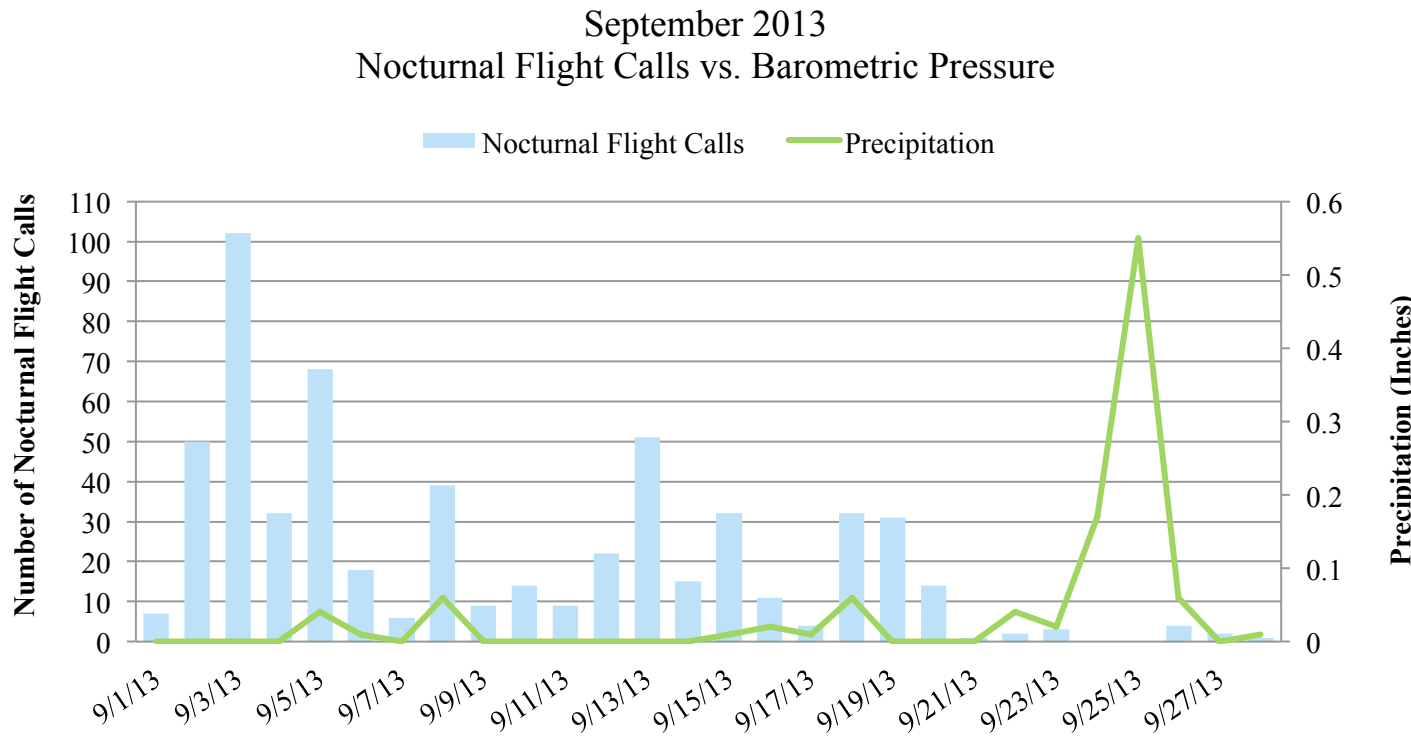
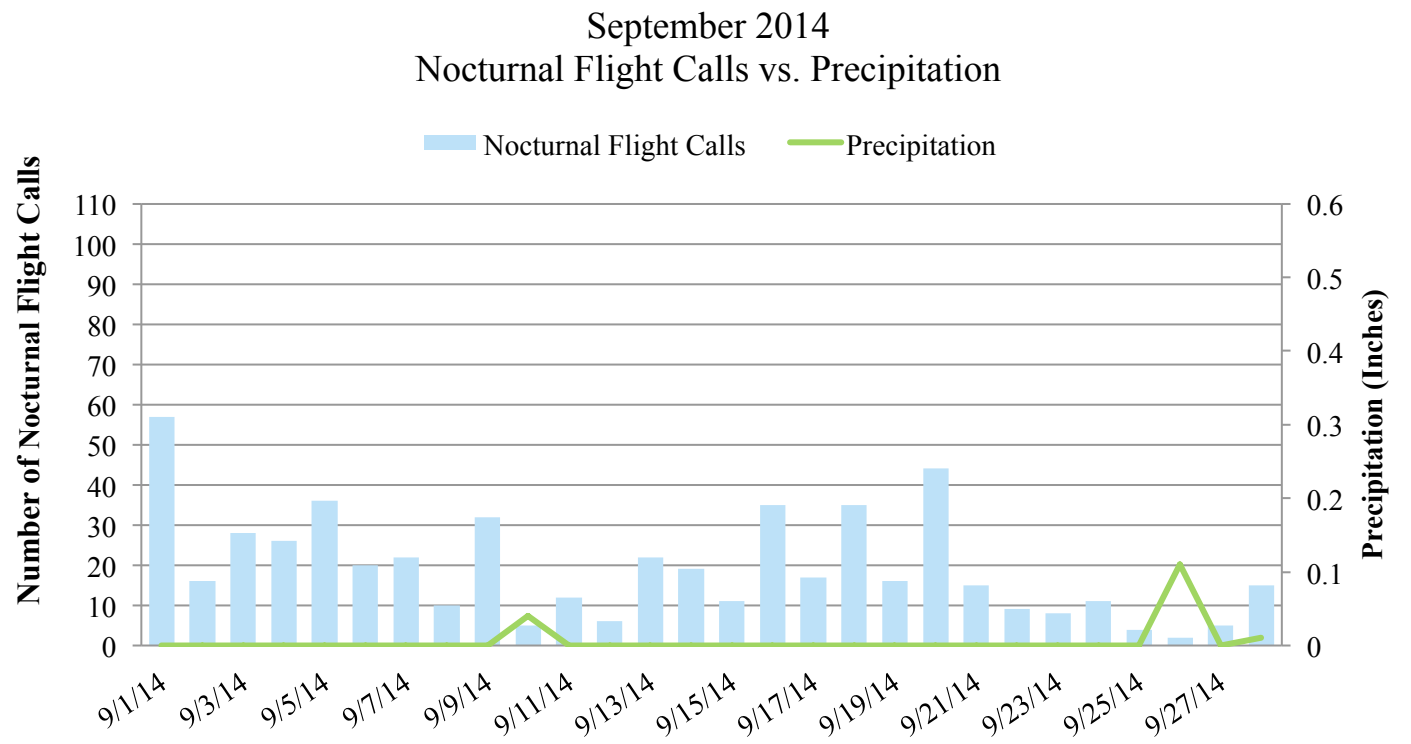
Figure 1. Bar height shows September 2013 and 2014 weekly “tseep” nocturnal flight calls.

We used data from the Sanfoin Bench weather station to explore trends between barometric pressure, precipitation, and the number of nocturnal flights call (Figures 2 and 3). When we compared the dips and rises in pressure to the number of nocturnal flight calls, we could not find consistent patterns.



Figures 2 (above) and 3 (bottom). Bar height shows the number of September nocturnal flight calls in 2014 and 2013; the lines track barometric pressure over the same period.

Large increases in nocturnal flight calls also did not coincide with precipitation events (Figures 4 and 5). This surprised us because we saw patterns in the August 2013 and August 2014 data. We plan to explore other weather variables such as wind speed, wind direction, and cloud ceiling height.



Figures 4 (above) and 5 (bottom). Bar height shows the number of September nocturnal flight calls in 2014 and 2013; the lines track precipitation over the same period.



## Long-billed Curlew Satellite Tracking Project

Our Long-billed Curlew transmitters have sent few locations, suggesting the batteries are not charging well. A recent signal from one of our female curlews showed her wintering in northwestern Mexico, about 1,000 miles from the ranch.



## Shrubby Draw Surveys 10/3/14

A shift in species composition occurred this week, with a marked increase in White-crowned Sparrows, American Robins, and Dark-eyed Juncos. We also saw a flock of Mountain Bluebirds in Tongue Creek.

### Species detected in shrubby draw surveys October 3rd, 2014

|                         | Partridge Alley | Sheep Camp | Tongue Creek | Total      |
|-------------------------|-----------------|------------|--------------|------------|
| White-crowned Sparrow   | 10              | 39         | 27           | 76         |
| American Robin          | 2               | 4          | 50           | 56         |
| Dark-eyed Junco         |                 | 43         | 2            | 45         |
| American Goldfinch      | 6               |            | 26           | 32         |
| Yellow-rumped Warbler   | 15              | 8          | 3            | 26         |
| European Starling       |                 |            | 16           | 16         |
| American Pipit          | 14              |            |              | 14         |
| Mountain Bluebird       |                 |            | 12           | 12         |
| Savannah Sparrow        | 10              | 2          |              | 12         |
| Black-capped Chickadee  |                 | 9          |              | 9          |
| Ruby-crowned Kinglet    |                 | 8          | 1            | 9          |
| Gray Partridge          |                 |            | 8            | 8          |
| Rock Wren               | 6               |            |              | 6          |
| Black-billed Magpie     | 1               | 1          | 3            | 5          |
| House Finch             |                 | 3          | 1            | 4          |
| Northern Flicker        | 2               |            | 1            | 3          |
| Spotted Towhee          |                 | 1          | 2            | 3          |
| Western Meadowlark      | 3               |            |              | 3          |
| Chipping Sparrow        |                 | 2          |              | 2          |
| Clark's Nutcracker      |                 | 2          |              | 2          |
| Lincoln's Sparrow       |                 | 1          | 1            | 2          |
| Merlin                  | 2               |            |              | 2          |
| Song Sparrow            | 1               |            | 1            | 2          |
| Golden-crowned Kinglet  |                 | 1          |              | 1          |
| Mountain Chickadee      |                 | 1          |              | 1          |
| Northern Harrier        | 1               |            |              | 1          |
| Pine Siskin             |                 | 1          |              | 1          |
| Prairie Falcon          | 1               |            |              | 1          |
| Red-breasted Nuthatch   |                 | 1          |              | 1          |
| Sharp-shinned Hawk      | 1               |            |              | 1          |
| Unknown Bird            |                 | 2          |              | 2          |
| <b>Total</b>            | <b>75</b>       | <b>129</b> | <b>154</b>   | <b>358</b> |
| <b>Species Richness</b> | <b>15</b>       | <b>17</b>  | <b>15</b>    | <b>30</b>  |



Partridge Alley's debris piles continued to provide shelter for a group of Rock Wrens.



ER

Kerr watched this Merlin hunt the White-crowned Sparrows, Horned Larks, and American Pipits foraging in Partridge Alley.



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## **Avian Science Center: Fall Migration Highlights**

### **9/29-10/3/14**

This week, we saw wide fluctuations in capture numbers, likely correlated with weather conditions. A cold front seemed to increase numbers on Monday (139 captures at all sites), but it prevented us from banding on Tuesday. Then on Wednesday, we experienced our highest capture rate in a single day on the floodplain (86 birds) for a total of 171 birds across all sites. On Thursday and Friday, we saw a dramatic decrease in numbers, with 44 and 35 total captures each day, respectively. The station on West Baldy Ridge (below) continues to catch the fewest birds, with 64 captures this week. The floodplain and Sheep Camp caught 174 and 151, respectively, for a total of 389 birds across all three sites.





On the floodplain, we finally captured a White-throated Sparrow; for the last three seasons, a single bird has been caught. The distinct facial markings (yellow lores, white throat, and dark eyeline) make this species one of the easier sparrows to identify. White-throated Sparrows breed in the forests of Canada, and northern parts of the Midwest and Eastern U.S. They spend winters throughout the eastern and southern U.S.





Most of our captures this week consisted of sparrows and kinglets, but we also caught warblers in low but consistent numbers. We captured Orange-crowned Warblers, Wilson's Warblers, and MacGillivray's Warbler, but the most common species was Audubon's Warbler (below), a subspecies of Yellow-rumped Warbler. The presence of yellow in the throat distinguishes this subspecies from its eastern counterpart, the Myrtle Warbler.





Dark-eyed Juncos are one of our top 10 species captured each fall. Juncos display a huge range of geographic variation throughout the country, with 15 described races. Sometimes we can identify juncos to race. The majority of our captures are Oregon Juncos, but each season we capture a handful of Slate-colored Juncos (below). This bird's flanks, which are gray rather than rufous or pink, and smooth gray upperparts, identify it as a male Slate-colored Junco.





# Raptor Migration Update

## Raptor Counts: 9/30-10/6/2014



We counted 914 raptors this week, including the season's daily high of 338 birds from October 1. Turkey Vultures and Red-tailed Hawks dominated the count, though we also saw more Sharp-shinned Hawks than in previous weeks. Eagle numbers also increased. We counted more raptors in September 2014 than in any of our previous fall surveys.

| Weekly (9/30-10/6) and Seasonal Raptor Totals |                    |              |              |
|---|--------------------|--------------|--------------|
|   |                    | Weekly Total | Season Total |
| Eagles  | Golden Eagle       | 6            | 9            |
|   | Bald Eagle         | 9            | 20           |
|   | Unknown Eagle      | 0            | 0            |
| Accipiters                                    | Sharp-shinned Hawk | 100          | 265          |
|   | Cooper's Hawk      | 47           | 224          |
|   | Northern Goshawk   | 4            | 20           |
|   | Unknown Accipiter  | 16           | 68           |
| Buteos  | Red-tailed Hawk    | 280          | 496          |
|   | Rough-legged Hawk  | 4            | 5            |
|   | Swainson's Hawk    | 6            | 26           |
|   | Broad-winged Hawk  | 11           | 40           |
|   | Ferruginous Hawk   | 0            | 4            |
|   | Unknown Buteo      | 11           | 27           |
| Falcons                                       | American Kestrel   | 30           | 300          |
|   | Merlin             | 7            | 26           |
|   | Peregrine Falcon   | 6            | 17           |
|   | Prairie Falcon     | 5            | 16           |
|   | Unknown Falcon     | 2            | 7            |
| Other   | Northern Harrier   | 19           | 78           |
|   | Osprey             | 21           | 69           |
|   | Turkey Vulture     | 326          | 1,086        |
|   | Unknown Hawk       | 4            | 21           |
|   | <b>TOTAL</b>       | <b>914</b>   | <b>2,824</b> |

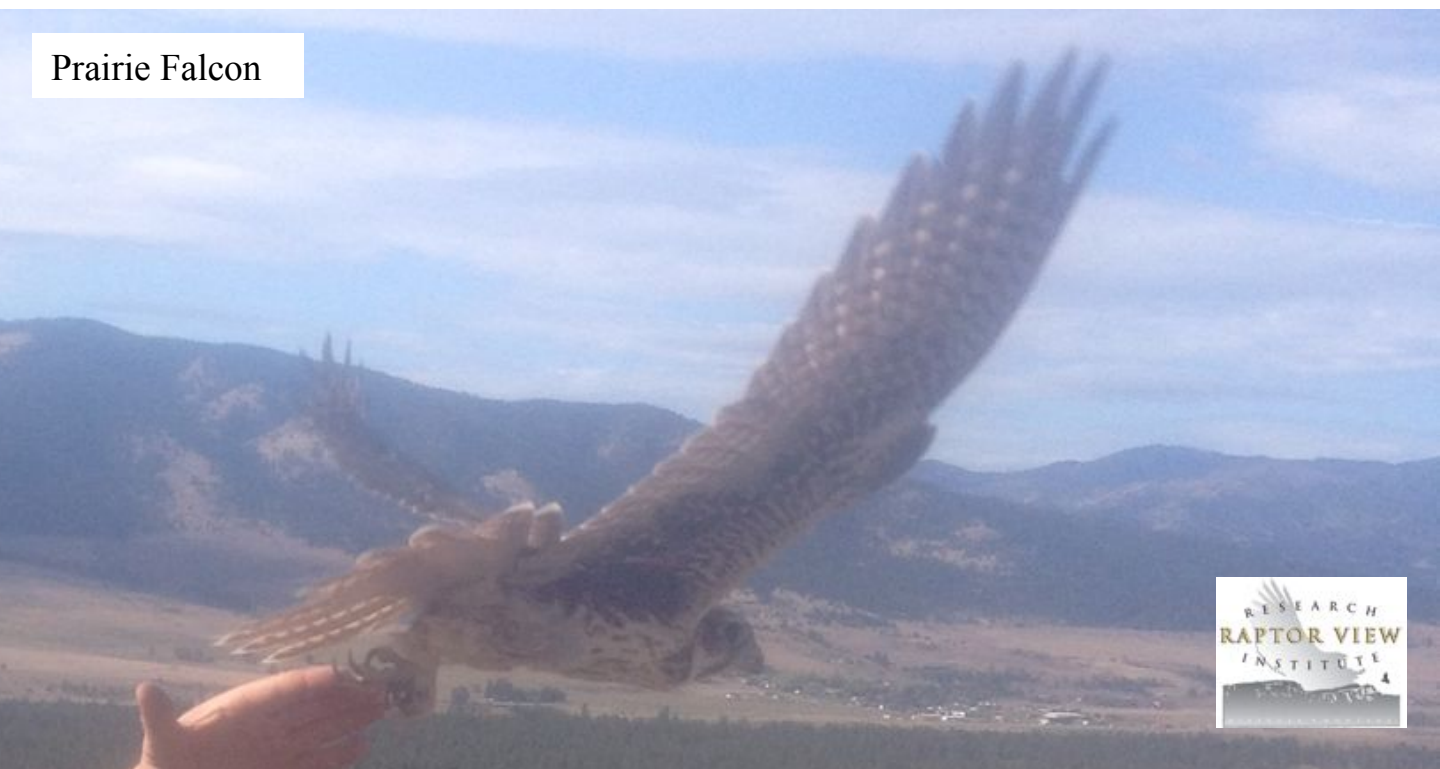
## Raptor Trapping: 9/30-10/6/2014

We banded nine raptors of five different species. We focused trapping efforts at Indian Ridge because most raptors were flying at low elevations. Falcons made up the bulk of our captures at Indian Ridge, though we also captured the season's first Rough-legged Hawk. On West Baldy Ridge, we also caught a Peregrine Falcon. A young Golden Eagle made a pass at our station at West Baldy Ridge. It struck our lure so powerfully that it broke the lines that tether the pigeon and escaped.

### Trapping summary for (9/30-10/6)

|            |                    | Weekly Total |            | Season Total |            |
|------------|--------------------|--------------|------------|--------------|------------|
|            |                    | Indian Ridge | West Baldy | Indian Ridge | West Baldy |
| Accipiters | Sharp-shinned Hawk | 1            | 1          | 5            | 8          |
|            | Cooper's Hawk      | 0            | 0          | 0            | 7          |
|            | Northern Goshawk   | 0            | 0          | 0            | 1          |
| Buteos     | Red-tailed Hawk    | 1            | 0          | 3            | 1          |
|            | Rough-legged Hawk  | 1            | 0          | 1            | 0          |
| Falcons    | American Kestrel   | 0            | 0          | 10           | 0          |
|            | Merlin             | 0            | 0          | 3            | 0          |
|            | Prairie Falcon     | 2            | 0          | 3            | 0          |
|            | Peregrine Falcon   | 2            | 1          | 2            | 1          |
| Other      | Northern Harrier   | 0            | 0          | 1            | 0          |
|            | <b>TOTAL</b>       | 7            | 2          | 28           | 18         |

Prairie Falcon



We captured a Peregrine Falcon (top) and Rough-legged Hawk (bottom) at Indian Ridge within ten minutes of each other.

