

Raptor View Research Institute
Research Summary 30 April, 2013
Adam Shreading, Rob Domenech

Osprey Satellite Tracking

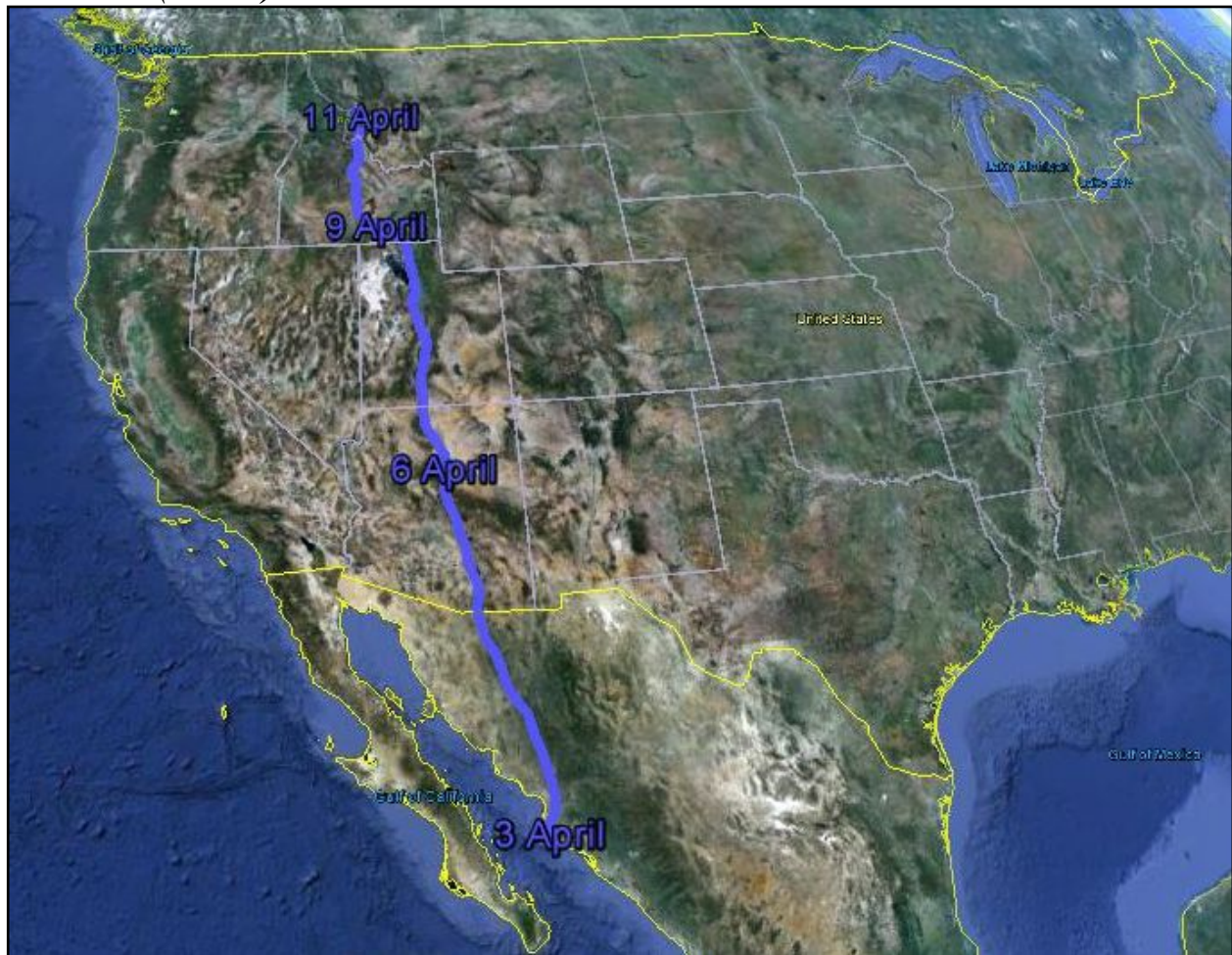
Four of the eight Ospreys fitted with satellite transmitters on the MPG Ranch during the summer of 2012 are alive and well. Three of the four young did not survive their first winter. We expected low survival of the young; estimates for first-year mortality of Ospreys is thought to be >75%. Three of the four adults have finished their northern spring migration, each returning to the nest it used in 2012. We were thrilled to find that their transmitters/harnesses looked great, and all three birds appear to be in great physical condition.

If you'd like to follow the Ospreys' tracks with Google Earth, be sure to take advantage of our Google Earth Network Link. In Google Earth, click 'Add' and select 'Network Link' on the bottom. Input "MPG Osprey Track" for 'Name' and paste "<https://dl.dropbox.com/u/63265611/MPG%20Osprey%20Track.kml>" in 'Link:'. This will add a file to the My Places section of your Google Earth. It is possible to set it up to refresh automatically, or you can just right click and refresh each time you want to view the file. Each time the network link is refreshed, it will load the most recent data.



The young from North Center Pivot Nest shortly after being outfitted with GPS transmitters.

Ranch Entrance Nest:
Adult Male (117183)



The adult male from the Ranch Entrance Nest wintered along the coast of Sinaloa, Mexico. He left his wintering grounds on 3 April, and arrived back on the ranch just eight days later. This 11 April arrival was relatively early compared to other Ospreys in the Bitterroot Valley. Shortly after he returned to the nest, he was joined by an unknown female. The two were seen copulating on several occasions. When his mate from 2012 (117182) arrived, the new female vacated the area and hasn't been observed around the nest since.

Adult Female (117182)

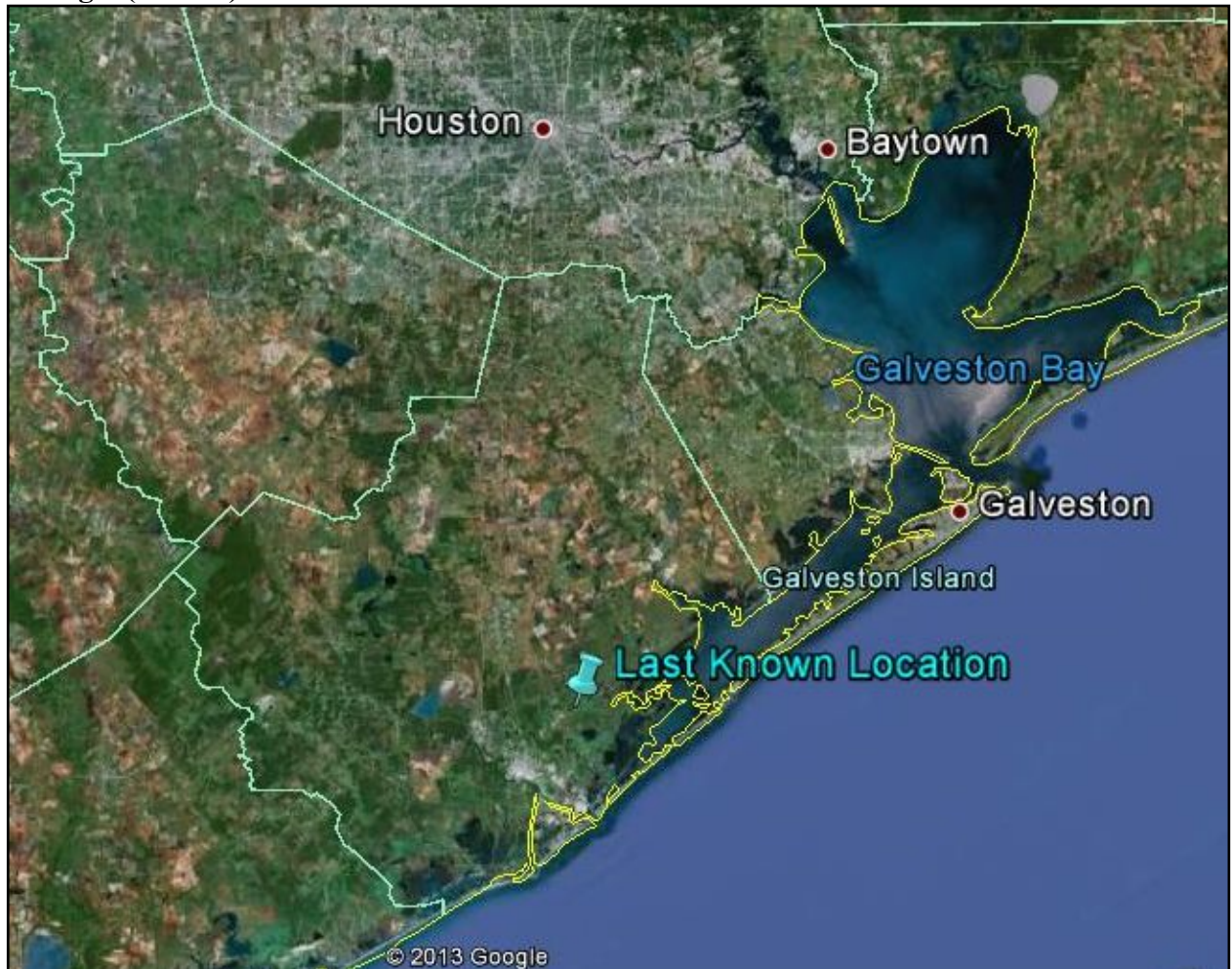


The adult female from the Ranch Entrance Nest spent the winter along the Pacific coast of southern Nicaragua. She left her wintering territory on 29 March, and reached her nest 19 April. We wish we were there to see her return—it would have been fascinating to see what sort of interaction she had with the unknown female Osprey her mate (117183) had taken-up with.



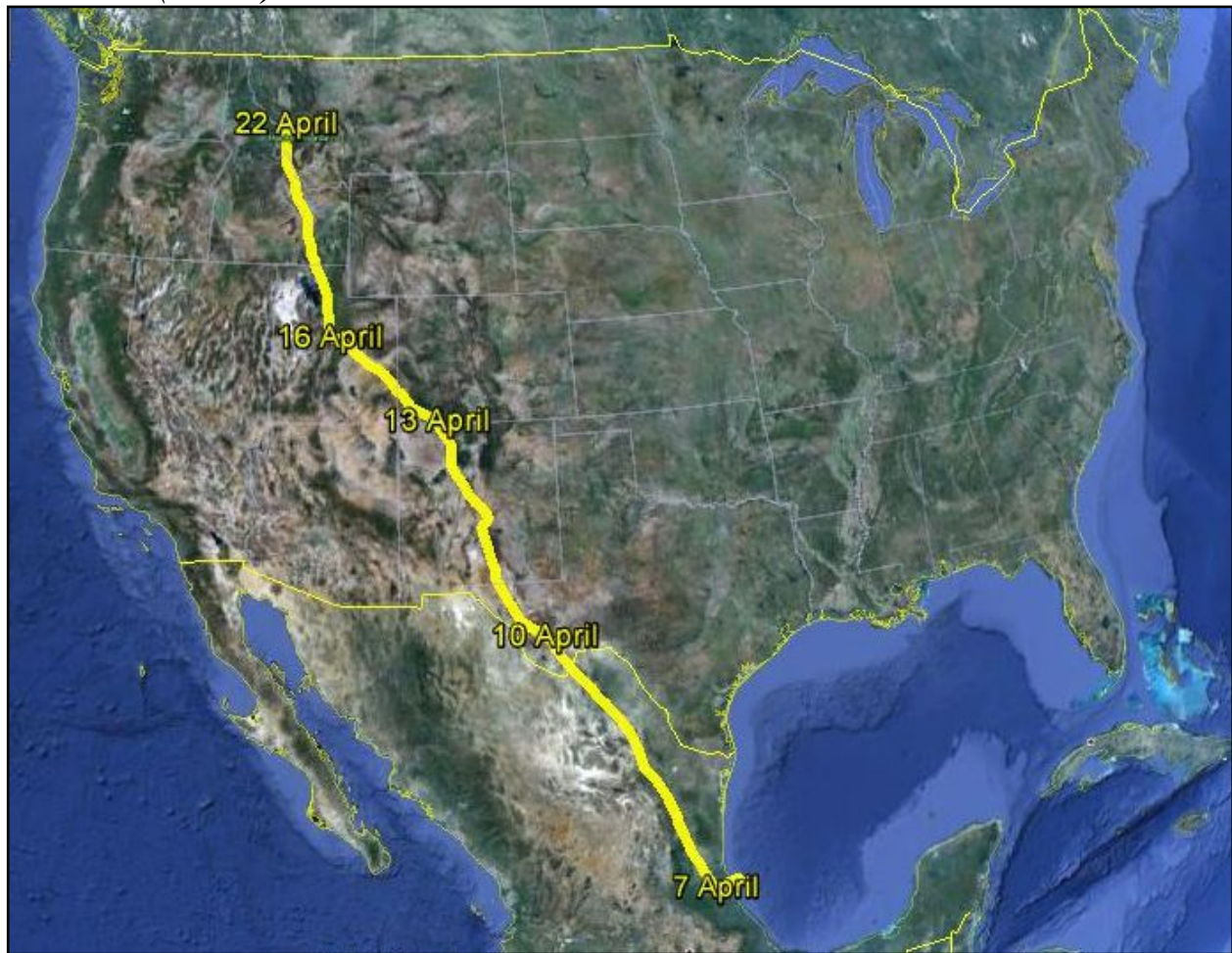
The adults from the Ranch Entrance Nest copulate soon after returning to the MPG Ranch.

Young 1 (117186)



Young 1 from the Ranch Entrance Nest reached its wintering ground near Galveston Island on the Gulf Coast of Texas 9 October of last fall. Osprey do not return to breeding grounds until their second or third year, so we expect this youngster to stay put until at least the spring of 2014.

North Center Pivot Nest:
Adult Male (117181)



The adult male from the North Center Pivot nest spent the winter near a small lake in northern Veracruz, Mexico. He had a small wintering territory, and moved very little compared to the other adult Ospreys. Occasionally, he would move so little that we would begin to worry he had died. He started his spring migration 7 April, and was the last of our adults to arrive back on the MPG Ranch 22 April. He quickly displaced an unknown male Osprey who had started to use the nesting platform, and has since been observed copulating with an unknown female.

Young 2 (117185)



The second youngster from the North Center Pivot Nest died of unknown causes 7 January on the coastal plain of Mexico, ~ 300 miles north of Veracruz. Until then, it had spent the winter along the coastal estuaries of the Caribbean. We contacted our friend Eduardo Martinez who raced to the Osprey's last known location. After three days of traveling and searching the area's thick, thorny brush Eduardo was able to locate the downed bird. Unfortunately, the carcass was too decomposed to positively determine the cause of death, though it was located in just ten days.



Eduardo searching the last known location of Young 2 from the North Center Pivot Nest.



This is the location where Eduardo discovered the carcass.



Notice how much the Osprey have improved their nest in the few days between these photographs.



Golden Eagles



Spring migratory tracks of six adult Golden Eagles outfitted with GPS transmitters on the MPG Ranch.

We are pleased report all six adult Golden Eagles (three male and three females) are alive and well. All but one adult male have left Montana and are currently on their summer ranges - four in Alaska and one in northwest British Columbia. We are thrilled with the preliminary results of this project, as are other Golden Eagle researchers following our progress. Our data suggests that the Bitterroot Valley and the MPG Ranch serve as important wintering grounds for these northern breeders. Additionally, we are also learning the Blackfoot Valley, the Rocky Mountain Front Range and portions of Idaho seem to be critical late winter areas for some these wintering adults.

Results from a geospatial analysis show that our adult Golden Eagles selected coniferous forest more than any other habitat type while wintering in the Bitterroot Valley. This contradicts previous habitat use data for the species, which show a far higher preference for open grasslands and sage. We also noticed that both individuals outfitted with GPS satellite transmitters in December 2011, showed a very high fidelity to their wintering grounds, migration routes and stop-over use areas this year compared to last.

Because Golden Eagles are difficult to capture, and GPS transmitter technology still relatively new, data on wintering habitat use in the Rocky Mountains is still very limited. This project will help us better understand what areas for this species of concern, and how best to manage our lands.

110270



This adult male left the Bitterroot Valley 16 March and arrived back on his summer range 5 April. As in 2012, he headed to the Lake Coeur d'Alene and Lake Pend Oreille areas of Idaho where he may have been hunting waterfowl. He returned to the Bitterroot Valley for two weeks before leaving for Alaska. Similar to last year, he is currently occupying a much larger summer range than any Golden Eagle our organization has ever tracked. Because adult Golden Eagles don't necessarily breed every year, we believed the large territory likely meant he was not raising young. This year we will search for any patterns within his movement data which could be the location of a nest.

110271



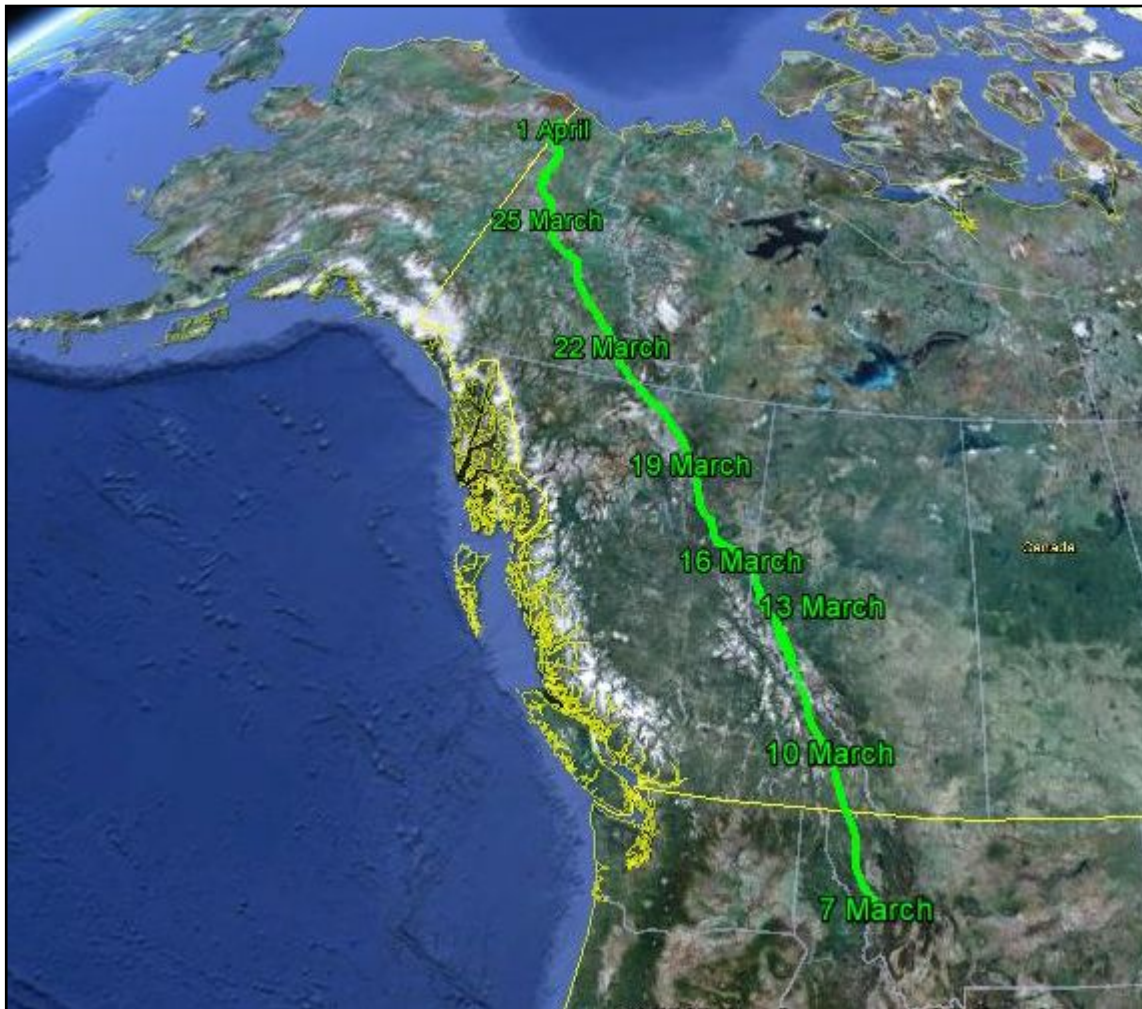
This adult female Golden Eagle left the Bitterroot Valley 21 February, slowly making her way through the Blackfoot Valley and the Rocky Mountain Front region. On 26 February, she reached the stop-over area on the U.S./Canada Border she used the previous year. Richardson's Ground Squirrels emerge from hibernation around this time and she may have been fattening up before continuing. After spending over three weeks in her stop-over area, she continued north 20 March and headed up to the Brooks Range of Alaska following her spring migration path from last year extremely closely. Currently she appears to be nesting in the same location as last year.

117184



This adult male left the MPG Ranch on 4 January, heading for Butte/Anaconda area. Because he stayed in the foothills of the Flint Creek Range for over a month, we began to think he was a resident of the area. On 17 February, however, he headed back west along the Clark Fork River, past Missoula, and headed up the Nine Mile Valley. He continued through the Canadian Rockies, stopping for about a week at two sites along the way. He eventually settled into the mountainous region of northwest BC. Currently he is occupying a tight territory roughly 60 miles from Frederick Sound, a coastal area of southwest Alaska.

117188



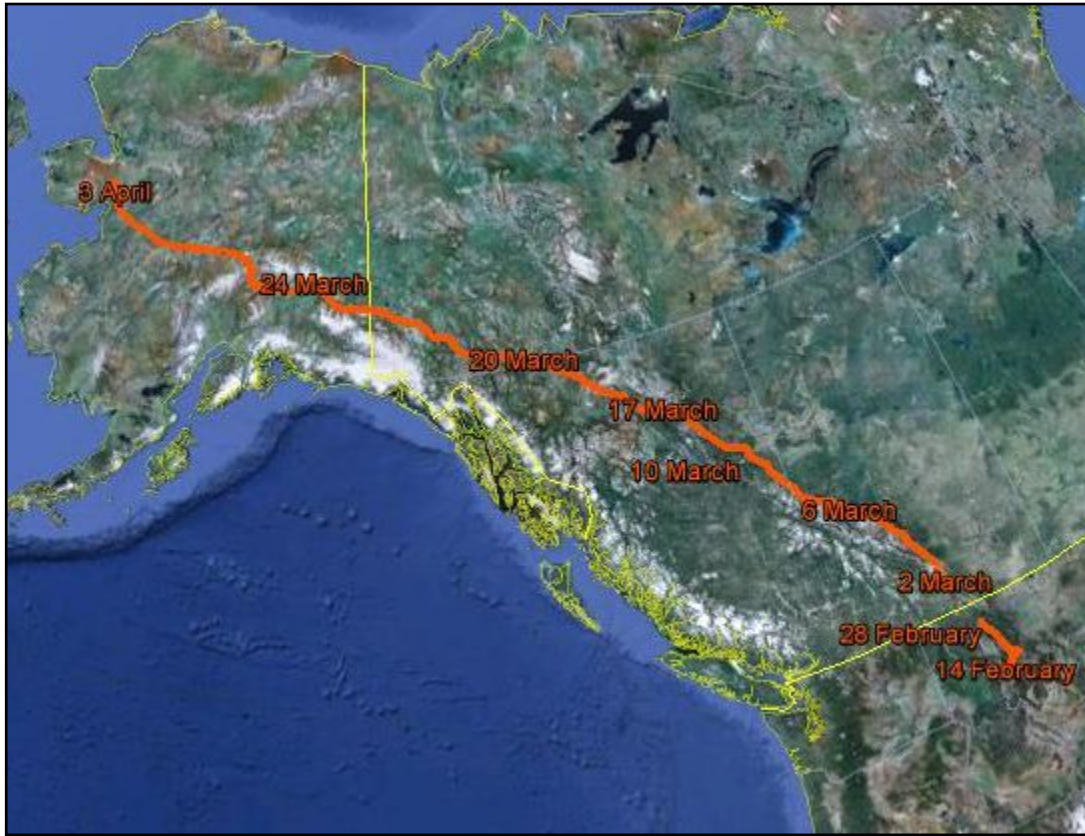
This adult female was instrumented on 8 January 2013 and left Montana 7 March. She also took the Nine Mile corridor to start her journey. She continued north along the Rocky Mountain Trench and crossed over onto to the Rocky Mountain Front via Jasper Nation Park. She continued along the Continental Divide reaching her summer range on the Arctic Wildlife Refuge on the far eastern flanks of the Brooks Range 1 April. This is the first eagle we ever captured that was blind in one eye—her ability to survive the course of such a long journey shows what great survivors these birds are!

117410



This adult male appears to be a non-breeder, and currently is in the Phillipsburg Valley. So far he has spent time on the MPG Ranch and has flown all over the Sapphire Mountains south to Darby. He has made four round trips out to the Front Range where he may have been feeding on Richardson's ground squirrels, migrating water fowl and maybe even Black-tailed Prairie dogs. It will be interesting to see if he continues to wander around Western Montana, or if he eventually settles in one area.

117411



No other bird has generated so much excitement amongst our peers as this adult female. Instrumented 10 February 2013, she left the Bitterroot Valley 14 February and stayed in the Blackfoot Valley near Ovando for over a month. On 27 February she headed north along the Swan Range and further north, following the tracks of 11027 into Alaska. Along her journey, she passed through Carol McIntyre's Denali National Park Golden Eagle study area. There she stopped for about a week in a large riparian area. She may have been feeding on large winter-killed animals such as moose. Eventually, she took off from Denali and continued further northwest arriving on her summer range on the Seward Peninsula of Alaska 3 April. To our knowledge, no other instrumented Golden Eagle has been tracked to this region!