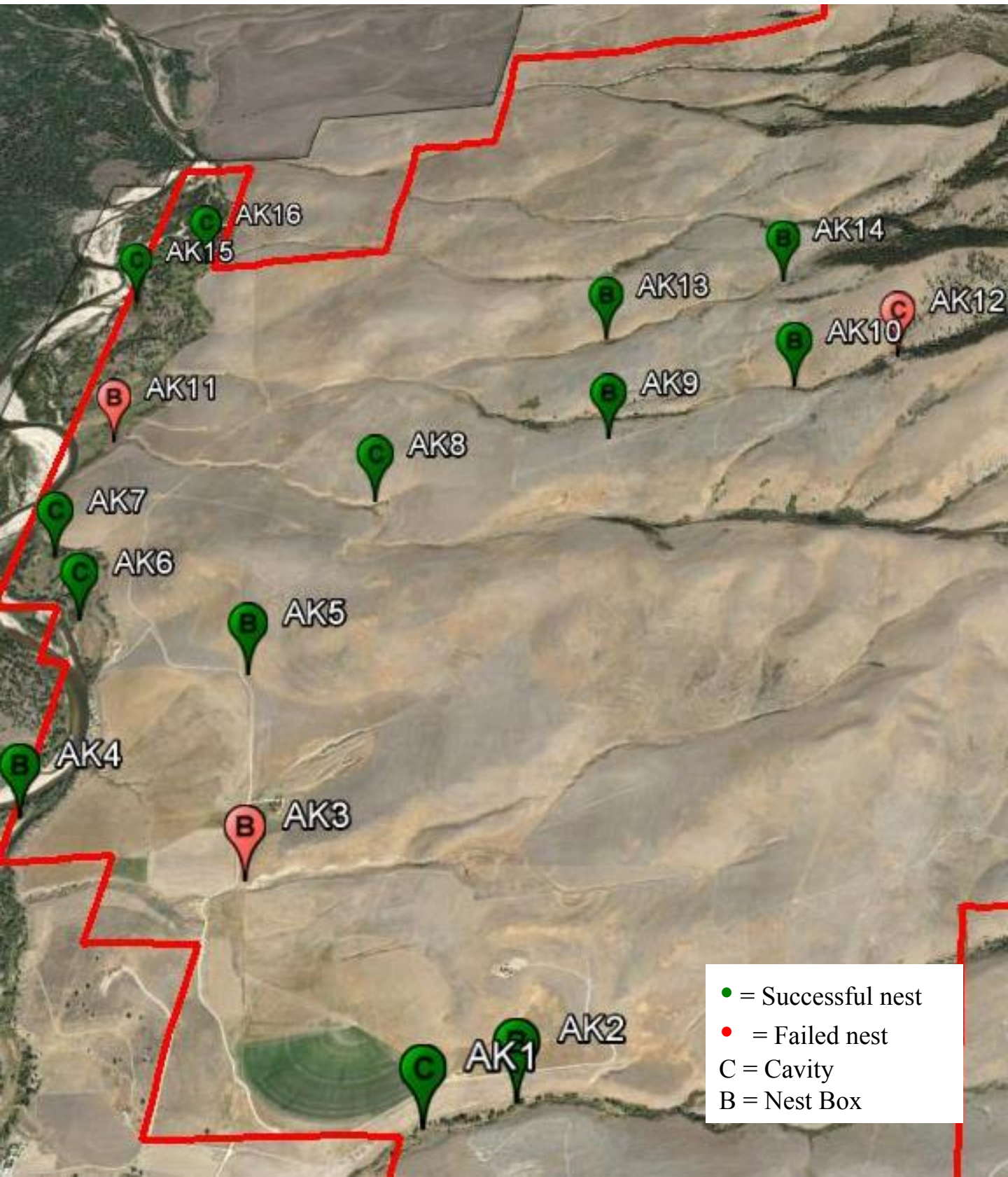


American Kestrel Research Summary
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Breeding Summary

This summer, we monitored American Kestrel nests on the MPG Ranch for the third consecutive year. Rather than attempt to survey the whole ranch, we focused our efforts at low elevations to the west of Mt. Baldy. We were able to survey this smaller area more thoroughly than in past years, and believe we located all nests in the area. We found 16 nests.



We found eight nests in natural cavities and eight in nest boxes. Compared to previous years, American Kestrels used fewer nest boxes along the main road. We suspect increased traffic along the roads made these sites less attractive to nesting kestrels. Tree Swallows used one nest box and European Starlings used eight nest boxes. Because they initiate nests earlier than American Kestrels, European Starlings prevent American Kestrels from using the nest boxes they occupy.



Twelve of 16 kestrel nests produced young this year (Table 1). We saw higher nest success in 2015 (75%) compared to 2014 (59%) or 2013 (63%). Similar to previous years, successful nests produced an average 3.83 young (SD=0.83), for a total of 46 fledglings.

Kestrels nested from April 23-July 21, with nests hatching between May 23 and June 21. Nests had a mean hatch date of June 8 (SD=11.42 days). We observed a similar mean hatch date in previous years (2014=June 8, 2013=June 11).

| Table 1. Nest type, hatch date, and fledging rate of American Kestrel nests on the MPG Ranch in 2015 | | | |
|--|-----------|------------|---------------|
| Territory | Nest Type | Hatch Date | Fledged Young |
| 1 | Cavity | May 26 | 4 |
| 2 | Nest Box | May 23 | 4 |
| 3 | Nest Box | Failed | - |
| 4 | Nest Box | Failed | - |
| 5 | Nest Box | July 1 | 4 |
| 6 | Cavity | June 1 | 2 |
| 7 | Cavity | June 11 | 4 |
| 8 | Cavity | June 8 | 4 |
| 9 | Nest Box | June 19 | 4 |
| 10 | Nest Box | May 29 | 3 |
| 11 | Nest Box | Failed | - |
| 12 | Cavity | Failed | - |
| 13 | Box | June 8 | 5 |
| 14 | Nest Box | June 14 | 5 |
| 15 | Cavity | June 21 | 3 |
| 16 | Cavity | June 6 | 4 |

Kestrel Banding

We captured and banded 41 kestrels, including 14 breeding adults and 27 nestlings. We've captured 191 kestrels since 2011.



Kestrel Resightings

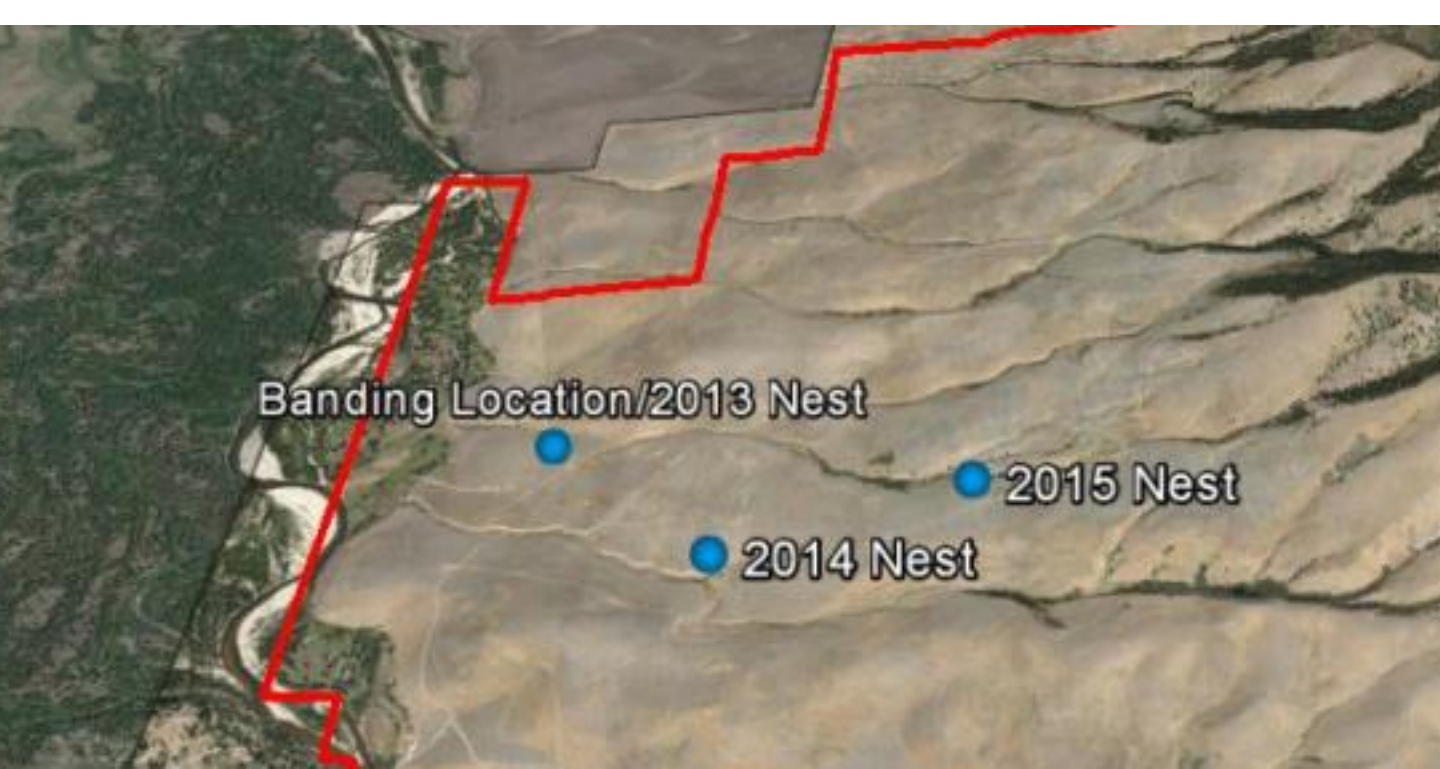
We encountered seven adult American Kestrels banded in previous years. To date, we have encountered 24 of 73 (33%) color banded adult American Kestrels in multiple breeding seasons. While a few individuals have used the same nests in multiple years, the majority of American Kestrels change nesting territories and mates each year.



We banded AK 47 on May 10, 2012 at his nest cavity, a large ponderosa pine snag above the northern floodplain. The following year he unsuccessfully nested with AK 85, who died while incubating. In 2014 he paired with an unbanded female, and fledged just two young from a nest box near the mouth of Tongue Creek. This year, he returned to his 2014 nest box where he failed to produce young with AK 162.



AK 88 has nested in three different locations with three different females since we banded him on June 25, 2013. Originally he and AK 83 fledged four young from a nest box along the main road. In 2014, he raised two young with AK 43 in a natural cavity north of Indian Ridge. This year, he and AK 152 fledged four young from a nest box near Sheep Camp.



We captured AK 62 on July 8, 2012 at her nest box near the Top House. She fledged four young with an unbanded male. In 2013, she moved to a nest box in the Lower Woodchuck drainage, where she successfully fledged four young with an unbanded male. She returned to this same area in 2014, but used a natural cavity rather than the nest box. She reared four young with AK 117. This year, she switched back to the nest box from 2013, and raised four young with an unbanded male.



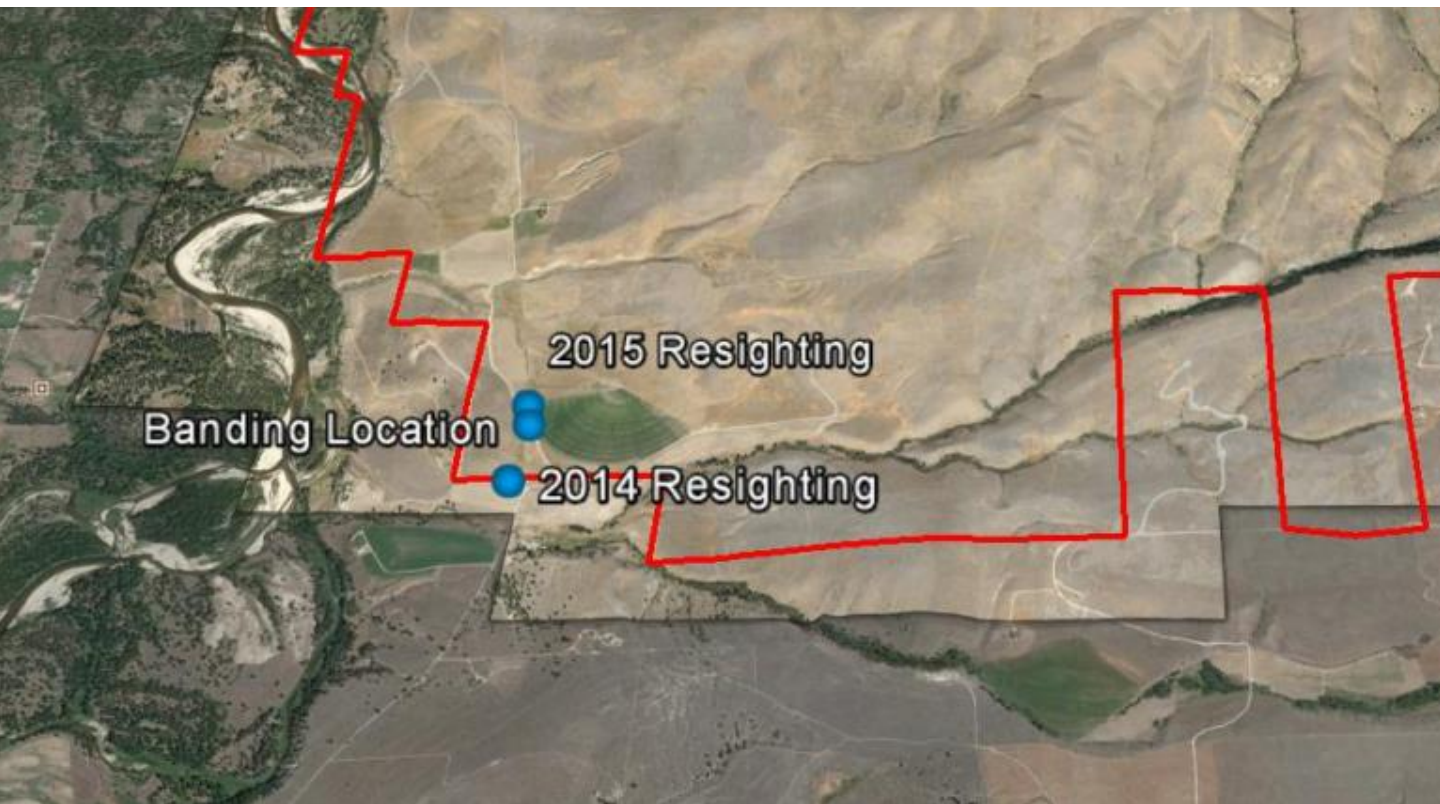
We banded AK 117 on April 10, 2014 at his territory in the Lower Woodchuck drainage, where he successfully fledged 4 young with AK 62. This year he returned to the drainage, but nested with a new unbanded female in a natural cavity 350 meters to the west of his 2014 nest box, where his previous mate bred with a new unbanded male (AK 62, above).



We captured AK 148 July 21, 2014 north of the duck pond, near a natural cavity where he fledged two young with an unbanded female. This year he fledged 2 young with an unbanded female from a different natural cavity near the Bald Eagle nest.



We captured AK 86 on May 24, 2013 near the south center pivot. We saw him perched in the same area numerous times during the past two summers, though we never documented him nesting. We believe he uses natural cavities off the MPG Ranch.



We captured AK 131 on May 14, 2014 1.75 km southwest of the ranch's entrance. This year we saw him perched in the same area.



Pinpoint Deployment

We deployed 14 PinPoint GPS units on adult American Kestrels breeding on MPG Ranch. We look forward to seeing these individuals next summer and learning where they spent the winter!

