To: Pheasants Forever and the California Department of Fish and Wildlife

From: U.S. Geological Survey, WERC Research Team

Subject: May 2015 Pheasant Project Update

May 2015 Summary Bullets

- **Monitored 37 pheasants (33 VHF, 4 GPS)**
- **Obtained 197 ground telemetry locations**
- **Obtained 733 GPS telemetry locations**
- **Located 29 nests (19 successful, 9 failed, 1 active)**
- **Monitored 19 active broods**
- **Conducted 45 predator surveys (raven/raptor)**
- **Conducted 45 microhabitat surveys**
- **Recovered 4 mortalities**

This document is an update specifically related to monitoring and research objectives for the Central Valley ring-necked pheasant research project during the 2015 season as of 31 May. This document does not represent a completed data analysis and findings. Instead, the purpose of this update is to provide you with a summary of our efforts, as well as observations regarding movements, reproduction, habitat, and predators from the field perspective. This information is preliminary and is subject to revision. It is being provided to meet the need for timely best science. The information is provided on the condition that neither the U.S. Geological Survey nor the U.S. Government may be held liable for any damages resulting from the authorized or unauthorized use of the information.

Telemetry Monitoring

During May 2015, we obtained 197 ground telemetry locations on 33 active VHF units (Gray Lodge WA, *n* = 13; Roosevelt Ranch, *n* = 12; Yolo Bypass WA, *n* = 8) and 2 GPS units equipped with VHF transmitters. Three females at Roosevelt Ranch were not tracked in May because either the VHF units ceased functioning or these females moved out of the study area. We also collected 733 GPS telemetry locations from the four pheasants outfitted with GPS transmitters at Roosevelt Ranch (*n* = 2) and Yolo Bypass WA (*n* = 2).

Reproduction

We have monitored a total of 29 nests and confirmed 28 nest fates (19 successful, 9 failed) across the three sites as of 31 May. Nine nests have been located at Gray Lodge WA (5 successful, 3 failed, 1 active), 11 nests have been located at Roosevelt Ranch (8 successful, 3 failed), and nine nests have been located at Yolo Bypass WA (6 successful, 3 failed) since mid-April. There are currently 19 active broods between the three sites, and the oldest brood has been active for more than 30 days. Broods are considered successful if at least one chick is present after 50 days.

Microhabitat and Avian Predator Surveys

We conduct microhabitat surveys and 10 minute point count surveys for ravens and raptors at all nest locations and at the first three brood locations. During point count surveys we also document the presence of livestock, horses, and anthropogenic subsidies such as roads, buildings, fences and farms. As of 31 May, we have conducted 45 raven/raptor and 45 microhabitat surveys across all three sites.

Successful nest at Yolo WA

Mortalities

We have recovered 4 mortalities across all field sites during May. Two mortalities were recovered at Yolo Bypass WA, one at Roosevelt Ranch, and one at Gray Lodge WA. The remains of the GPS outfitted female at Yolo Bypass WA were located in a field east of her nest location. Body and tail feathers were found near the nest and flight feathers on the carcass showed evidence of teeth marks, suggesting mammalian predation. The female killed at Gray Lodge WA was found along the edge of a brood strip on the west side of the wildlife area. The carcass was found mostly intact, but the chest and legs were picked clean suggesting that she was killed by an avian predator. The other two mortalities were also believed to be caused by predation, but only bone fragments and feathers were found. Since January 2015, we have recovered 6 mortalities at Gray Lodge WA, 9 at Roosevelt Ranch, and 6 at Yolo Bypass WA.

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