

ANNUAL OSPREY REPORT 2023 Survey Year

**submitted to
The California Department of Fish and Wildlife
by
Green Diamond Resource Company**

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Introduction

In 2006, Green Diamond Resource Company (GDRCo) and the California Department of Fish and Wildlife (CDFW) developed and began implementing an ownership-wide osprey consultation protocol for timber harvest plans (THPs).

In accordance with this consultation protocol, between March 15th and August 15th, GDRCo biologists conduct searches and status checks for historic and active osprey nests occurring within 0.25 mile of ground-based operations and 0.5 mile of helicopter-based operations expected to be active during the critical period for osprey. The critical period is March 1st to April 15th and extends to August 15th for occupied nests. Nest status need not be determined if ground-based operations within 0.25 mile of the nest or helicopter-based operations within 0.5 mile of the nest occur outside the critical period. If timber harvest operations commence between August 15th and September 1st, then a check for late-season occupancy of the nest is required. This check ensures that unfledged chicks are not present at the nest.

The ownership-wide consultation allows operations within 0.25 mile (but not within 500 feet) of occupied nests during the breeding season so long as operations occur as late in the breeding season as operationally feasible and encroach upon the 0.25-mile disturbance buffer and nest gradually. If operations are to occur within the 0.25-mile disturbance buffer during the breeding season, the nest must be monitored to determine if operations are adversely affecting the nesting osprey or their young.

This report summarizes the survey results for osprey nests covered by the consultation during 2023. An occupied nest is defined as a nest or nest tree used by an osprey pair during the current nesting season. An active nest is defined as a nest or nest tree used at least once during the three most recent nesting seasons. A tree may be considered an active nest tree even if it has lost all or a portion of its stick nest, provided that suitable substrate for rebuilding the nest remains. A historic nest is defined as a nest or nest tree used at some time in the past but is not currently occupied or active.

Summary of Results

Twenty-five individual historic or active nests or nest trees were surveyed a total of 87 times in 2023 (Figure 1). Of the 25 nests surveyed, one nest was occupied, and 24 were unoccupied (Figure 2). Reproduction was confirmed at the occupied site (Table 1). However, surveys to confirm reproduction are only required when operations are planned within 0.25 mile of an occupied nest during the critical period. Therefore, reproductive surveys are not conducted at all occupied sites in a given season, and no inferences should be made regarding osprey productivity.

No helicopter-based THP operations occurred within 0.5 mile of historic or active osprey nests during the 2023 critical period. One ground-based THP with operations during the critical period occurred within 0.25 mile of 14 osprey nests (Table 2). Thirteen of the THP-associated nest sites were determined to be unoccupied (Figure 2). Jac #34 was determined to be occupied and was located within 0.25 mile of THP 15-2101 (1-22-0126HUM) Unit A. Prior to the commencement of operations within the 0.25 mile buffer, Green Diamond developed a monitoring strategy in accordance with the property-wide consultation guidelines and obtained concurrence for the strategy from CDFW. Operations within the disturbance buffer of the Jac #34 nest occurred as

late in the breeding season as possible and encroached upon the buffer and nest gradually. Concurrent monitoring occurred with the start of operations within the buffer and for road use through the buffer (Table 3). An additional concurrent monitoring session occurred with the change in the proximity of operations (i.e., the yarder moved closer to the nest tree). Concurrent monitoring confirmed that this nest was occupied by a nesting pair and one juvenile, and no disturbance behavior was observed.

No operations occurred within 0.25 mile of osprey nests where occupancy could not be determined. Refer to Table 2 for a complete summary of the status of the 2023 osprey nests and THP associations and Map 1 for the nest location and THP unit boundaries.

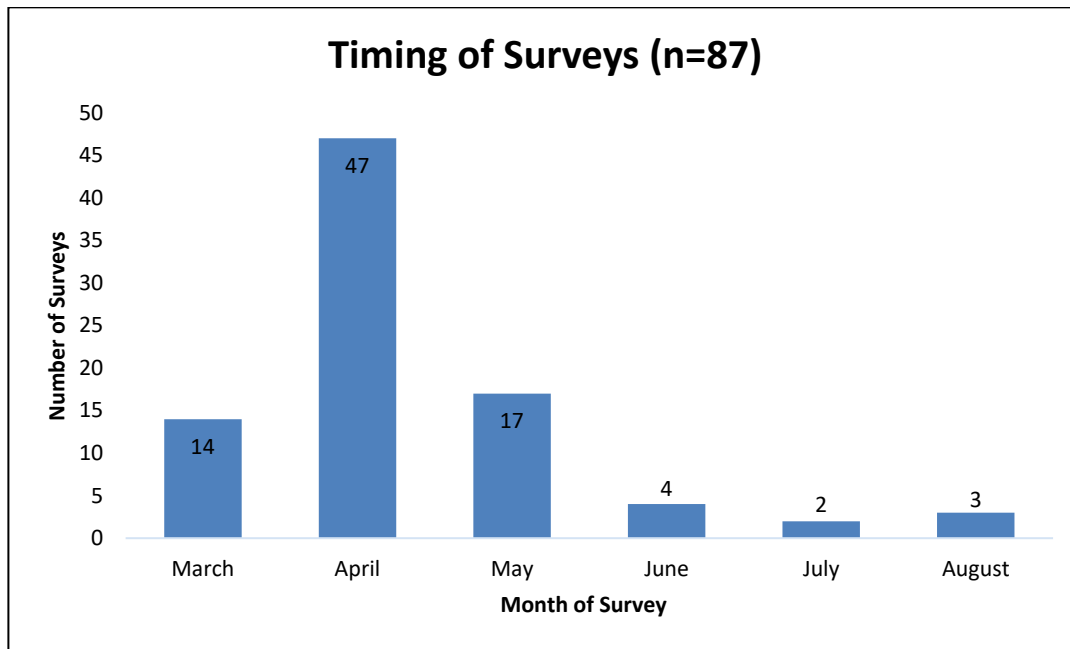


Figure 1: Timing of surveys conducted during the 2023 osprey critical period.

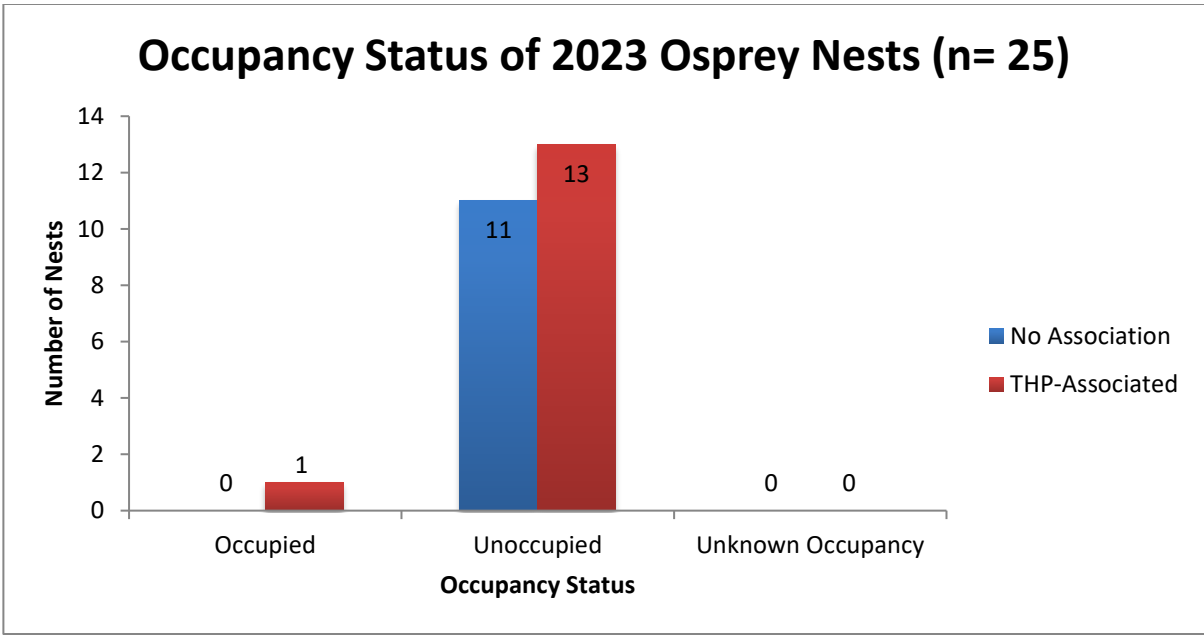


Figure 2: Occupancy status of osprey nests surveyed in 2023.

Table 1. Occupied sites with survey results confirming reproduction, 2023.

Site Name	THP	State ID	Occupancy Status	Survey Results
Jac #34	15-2101	1-22-0126-HUM	Occupied	4/20/2023 Adult in incubation posture 8/1/2023: Juvenile on nest tree. 8/8/2023: Juvenile on nest tree. 8/11/2023: Juvenile on nest tree.

Table 2. Summary of occupancy status and THP association by nest site, 2023.

Site Name	Ground-based operations within 0.25 mile during critical period	State ID	Survey Occupancy
Jac #3	15-2101	1-22-0126-HUM	Unoccupied
Jac #5	None	None	Unoccupied
Jac #13	15-2101	1-22-0126-HUM	Unoccupied
Jac #17	15-2101	1-22-0126-HUM	Unoccupied
Jac #19	None	None	Unoccupied
Jac #20	15-2101	1-22-0126-HUM	Unoccupied
Jac #24	15-2101	1-22-0126-HUM	Unoccupied
Jac #25	None	None	Unoccupied
Jac #26	15-2101	1-22-0126-HUM	Unoccupied
Jac #27	15-2101	1-22-0126-HUM	Unoccupied
Jac #28	15-2101	1-22-0126-HUM	Unoccupied
Jac #29	None	None	Unoccupied
Jac #30	15-2101	1-22-0126-HUM	Unoccupied
Jac #32	15-2101	1-22-0126-HUM	Unoccupied
Jac #33	15-2101	1-22-0126-HUM	Unoccupied
Jac #34	15-2101	1-22-0126-HUM	Occupied
OH #2	None	None	Unoccupied
OH #3	15-2101	1-22-0126-HUM	Unoccupied
OH #18	15-2101	1-22-0126-HUM	Unoccupied
OH #19	None	None	Unoccupied
OH #20	None	None	Unoccupied
OH #30	None	None	Unoccupied
OH #31	None	None	Unoccupied
Salt #3	None	None	Unoccupied
Salt #7	None	None	Unoccupied

Table 3. Summary of concurrent nest monitoring, 2023.

Site Name	Date	Duration	Operations	Observations
Jac #34	8/1/2023	08:35 – 11:35	Yarder active within buffer plus equipment passes through buffer	No indication of disturbance. Juvenile perched on nest tree at start of survey. Adults seen in area and one adult delivered a fish to the nest. Juvenile observed eating the fish and occasionally taking flight around the nest tree.
Jac #34	8/11/2023	05:35 – 07:35	Yarder active within buffer in closer proximity plus additional equipment passes	No indication of disturbance. No adults observed. Juvenile intermittently present on nest tree, but no reaction to activity.