



2010 BALD EAGLE INVENTORY & MONITORING

Annual Progress Report



March 2011

Title page photograph: new Mill Creek territory bald eagle nest. Note juvenile bald eagle standing in nest – center of photo.

INTRODUCTION

The bald eagle, (*Haliaeetus leucocephalus*), was taken off the list of species protected by the federal Endangered Species Act (ESA) in July, 2007 (USDI 2007). Bald eagles were originally listed as endangered in 1967, but due to a rising population trend, it was de-listed three years ago. Despite being de-listed, provisions within the ESA and other state and federal laws mandate continuing monitoring and protection of bald eagles within Redwood National and State Parks (RNSP or parks). Section 4(g)1 of the federal ESA requires that a species be monitored for five years post de-listing to ensure that de-listing was warranted and that populations are sustainable. The bald eagle is still listed, and protected, by the state of California as threatened under the California Endangered Species Act. In addition, the federal Bald and Golden Eagle Protection Act of 1940 (Eagle Act) (16 USC 668-668c) provides full protection almost equal to those protections formerly afforded by the federal ESA. The Eagle Act prohibits “take” of bald and golden eagles. Take is defined by the law as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” Disturb has been interpreted by the USFWS as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (USFWS 2007). Due to the protected status of the bald eagle, the Fish and Wildlife Branch staff at RNSP continues to annually monitor known nest sites within the parks, and compiles and records all reported bald eagle sightings within the parks. When personnel and time allows, the Fish and Wildlife Branch staff also attempts to survey habitat that has a high potential to support new bald eagle nests and winter roosts. This information is used to advise park management decisions so that ongoing and proposed management actions can be designed to not adversely affect bald eagles as well as encourage the further recovery of the species.

SURVEY AREA / METHODS

The objectives, methods and primary survey areas of the RNSP bald eagle inventory and monitoring program are described in Appendix A of the 2001 RNSP bald eagle annual progress report (Holm 2001).

RESULTS

All survey work during 2010 was conducted from the ground, with no aerial or kayak/canoe surveys performed. Forty-three bald eagle observations were reported during 2010. The majority of observations and survey effort were in areas around the two known nest territories; the first on the ridge to the south of the old South Operations Center (SOC) near Orick and the

second along the main stem of Mill Creek. All other observations were incidental sightings reported by RNSP biologists, other RNSP staff or reliable visitor accounts.

The old SOC ridge territory was first monitored on 26 May 2010. On 1 July 2010 it was determined that the nest was found in 2008 (Bensen 2008) had been blown out of the nest tree and had not been replaced. No nest for this territory was therefore observable. However, repeated adult bald eagle sightings, calls heard in and around the ridge and one sighting of a possible juvenile bald eagle on 11 August 2010 near the old nest trees ridge appeared to mean that the territory was still occupied and possibly reproductive. A new nest location, if there was one, was not determined. The reproductive status for the territory was therefore made “not determined” for 2010. This territory’s annual reproductive status is summarized in Table 1.

The main stem Mill Creek bald eagle territory was first surveyed on 25 May 2010. Last year’s nest tree was abandoned and a new nest tree, found on 29 June 2010, was established approximately one quarter mile away from the former nest tree. A single eaglet were last seen on the new nest on 6 July 2010 and assumed to have fledged. The annual reproductive status of this territory is summarized in Table 1.

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Table 1. Reproductive status of known bald eagle territories in Redwood National and State Parks.

Year	Number of Eaglets Fledged	
	Old SOC Ridge Territory	Main Stem Mill Creek Territory
1997	ND ¹	X ²
1998	ND ¹	X ²
1999	2	X ²
2000	1	X ²
2001	1	X ²
2002	2	X ²
2003	2	1
2004	1	DNN ³
2005	1	1
2006	DNN ³	1
2007	1(2?)	2
2008	2	2
2009	DNN ³	2
2010	ND ¹	1

¹ Territory occupied but reproductive status not determined (ND).

² Territory did not exist or was unknown (X).

³ Territory occupied but did not nest (DNN).

Other bald eagle sightings include adult and subadult individuals seen all along Gold Bluffs Beach (8) throughout the year. One sighting of an adult recorded along Redwood Creek in the summer. Four adult or subadult bald eagles sightings occurred near the Klamath River mouth

and the nearby coast throughout the summer and spring. One adult eagle was seen in the False Klamath Cove area, and one adult was seen at Crescent Beach.

No wintering bald eagle surveys were during 2010.

DISCUSSION / RECOMMENDATIONS

The old SOC ridge territory was possibly reproductive in 2010, but it appears that the nest has been moved into an unknown location. This territory has been very productive, producing 13 eaglets. A nest had been maintained in the same general area on a ridgetop above Orick up until this year, but the old nests appear to have been completely blown out of those trees. The main stem Mill Creek territory was productive again this year, fledging an eaglet despite the nest tree being located near the Mill Creek Horse Loop Trail. The pair has moved the nest to a new nest tree, but it is still near the trail. As stated in previous years' reports (Bensen 2005, 2006, 2007, 2008, 2009), nesting eagles could potentially be disturbed by visitors walking along the trail. Bald eagles, however, have shown some ability to habituate to minor disturbances on the ground (Fraser et al. 1985). It is unknown if visitors using the Mill Creek Horse Loop Trail influenced the eagle pair along Mill Creek, but the fact that the nest has fledged eaglets during seven separate breeding seasons while the trail was open to hikers and equestrians continues to be extremely encouraging. The Mill Creek Horse Loop Trail was closed to public access for the third time this year from 15 October to 31 March to protect developing salmon eggs from trampling at fords across Mill Creek. Presumably, the lower visitor activity along the Mill Creek Horse Loop Trail during the early portion of the bald eagle nesting season lowered the amount of potential disturbance occurring along the trail. It continues to appear that extending the trail closure period to prevent disturbance to the Mill Creek bald eagle nest is unwarranted. It can be assumed after this many successful breeding seasons that this pair has become habituated to the presence of park visitors on the trail below their nest for at least a portion of their nesting period.

Returning to the pattern seen during all previous years but two years ago, significant numbers of sightings of adult eagles along Gold Bluffs Beach during the breeding season occurred regularly this year. It may be that all of the eagle sightings were of individuals from the old SOC ridge territory or are from other territories on the Klamath River; but it may also indicate that some nesting activity was occurring inland within Prairie Creek Redwoods State Park. Additional surveys within that area during the 2010 eagle breeding season are highly recommended.

The numerous other sightings of both subadult and adult birds during all times of the year throughout other parts of the park were also encouraging. Young, non-breeding eagles appear to continue to explore the park during the breeding season and may potentially establish territories within RNSP when they reach adulthood. The scattered sightings of adult eagles within the park during the breeding season are harder to interpret. Without individual markings, it is impossible to determine whether the adults seen are from the two known territories within the park, from unknown territories within the park, or from distant territories outside of the park. Regardless, all the eagle activity within RNSP continues to indicate a general upward trend of the park's eagle population.

Nationally, the bald eagle has been taken off the federal endangered species list and thus is considered to be “recovered.” The park has an obligation to monitor the species for an additional three years under that law. The species is still listed as threatened by the state of California and so the park is obligated to monitor the species’ status under that law. Finally, the federal Eagle Act obligates the park to provide extensive protections for bald eagles in perpetuity. Suitable and efficient protection can only occur if park managers know where eagles are nesting and congregating; otherwise inefficient “blanket” protection measures would need to be instituted. The parks’ Fish and Wildlife Branch needs to continue to monitor known bald eagle nest sites within RNSP so that overall park eagle productivity can be measured and to ensure that park actions are not negatively impacting breeding pairs. We should also continue to compile and record all reported bald eagle sightings within the park. Timely inspection of congregated bald eagle sightings during the breeding and nesting period continues to appear to be the most effective way to direct survey efforts for new bald eagle nests. If budgets, personnel, and time allow, additional surveys of the areas described in the Bald Eagle Inventory and Monitoring Protocol (Holm 2001) should be undertaken.

LITERATURE CITED

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