

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON

UNITED STATES OF AMERICA)
)
 Plaintiff,) Civil No. 96-1575-HO
)
 v.) ORDER
)
WEST COAST FOREST RESOURCES)
LIMITED PARTNERSHIP and)
DEANS MT. LOGGING CO.,)
)
 Defendants.)
_____)

The United States brought this suit to permanently enjoin the clearcut harvest of ninety-four acres of privately owned forest land in Lane County, Oregon, known as the Good Hominy Unit ("the Unit"). On July 28, 1997, this court denied the motion for permanent injunction and instead issued a temporary injunction for one year, in order to maintain the status quo until further research could be completed. The court ordered plaintiff to commence

radiotelemetry monitoring of a pair of owls known as the "Chickahominy Pair" ("the owls," or "the pair"). Now before the court is plaintiff's motion for permanent injunction (#109). The court heard oral arguments and the presentation of evidence on November 9, and 10, 1999.

I. Summary of Evidence Presented

A. Testimony of Dr. Forsman

The United States presented the testimony of Dr. Eric Forsman, a Research Wildlife Biologist employed by the United States Forest Service, Pacific Northwest Research Lab in Corvallis, Oregon. Dr. Forsman opined that, although he cannot predict with absolute certainty whether harvesting the Unit would cause the owls to leave the site, it is reasonably certain that harvesting the Unit is likely to "significantly impact" the reproductive rates of the pair and its ability to survive on the current site. Dr. Forsman opined that harvesting the Unit will harm the pair by reducing the prey supply and causing an inability to roost in the Unit. He explained the chain of events that could lead to the owls' death: (1) clearcut; (2) prey in the area becomes no longer available; (3) reduction in prey forces owls to forage elsewhere; (4) the owls must expend more energy to find food; and (5) the owls could potentially starve to death, produce fewer young because of less food,

or even be predated due to risky travel to other sources of food.

He acknowledged that if there was still enough habitat and prey after harvesting, there would be no significant effect on the owls. Dr. Forsman used a 75% Adaptive Kernel ("AK") method in determining the "core area." He found that the Unit was within the 75% AK for the male, but not for the female. He opined that 14% of the landscape inside the home range consists of older forests, and that 21% of the sightings from the study were in the older forests. He opined that 56% of the landscape is pole young and broad leaf, and that 60% of the sightings were in this tree type. He concluded that the older forests were used more than expected based on their availability. Based on prior research of other areas, Dr. Forsman opined that owls with 20% or less of old forest produced far fewer young than those with 60% or more.

Dr. Forsman's definition of "suitable habitat" included areas where owls are able to replace themselves. Dr. Forsman acknowledged that the telemetry study revealed that pole young and broadleaf were used for roosting and foraging by the owls, but opined that other studies of other sites indicate that pole young and broadleaf are not suitable habitat.

Dr. Forsman acknowledged the pair's recent high reproductive rate of .86, and that the increase occurred despite previous clearcuts in the area, but opined the high reproductive rate is not indicative of survivability because it is within a relatively short period of time.

B. Testimony of Dr. Ramsey

The government presented the testimony of Fred L. Ramsey, Ph.D., a professor of statistics at Oregon State University. Dr. Ramsey testified as to the relevancy of defendant's decision to change the boundaries of the proposed harvest. Following the telemetry study, defendant changed the boundaries to avoid areas containing numerous telemetry points. Dr. Ramsey opined that changing the Unit's boundary has no statistical validity. He further testified that without knowing habitat differences, no inference can be drawn from the fact that one area contains seven telemetry points, and another contains only one. Dr. Ramsey explained that the models created from the telemetry study are descriptive, not predictive, and that if there is no difference in habitat, then one could assume the points would be dispersed differently next time. Dr. Ramsey acknowledged that there may be a missing variable.

C. Testimony of Dr. Rosenberg

The government presented the testimony of Daniel K.

Rosenberg, Ph.D., an assistant professor of wildlife ecology in the Department of Fisheries and Wildlife at Oregon State University. Dr. Rosenberg opined that it is reasonably certain that harvesting the Unit will significantly impact the reproduction and survival of the owls, and may lead to site abandonment. He explained that old forest is sparse in the Oregon Coast Range, the Unit includes old forest, and the telemetry study indicated a strong selection for older forests over pole young. Dr. Rosenberg noted that the Unit is highly associated with owl usage; it was clearly selected for foraging, particularly by the male owl. He acknowledged that the owls use pole young and broad leaf trees, but "not necessarily proportionate to their availability." He opined that pole young and broad leaf are not suitable habitat.

Dr. Rosenberg, in referring to the telemetry study, stated that the owls were almost three times more likely to select a stand within the Unit, rather than outside the Unit. He opined, "There's something about the Unit [that they prefer]." He stated that there could be other unknown variables present making the Unit "special."

He agreed with Dr. Ramsey that there is no reason to believe a revision of the Unit would be consequential, but that there may be an unidentified variable not accounted for. He further noted that the owls' main source of prey is

the flying squirrel, and that accessibility to, rather than abundance of, prey is most important. He opined that there is no significant difference in the abundance of flying squirrels in old or new forests.

Dr. Rosenberg stated that a threshold of 30% of old forest must be met for survival of owls. He asserted that he did not find it surprising, but rather, encouraging, that despite the relatively low percentage of old forest currently in the area, the owls have recently experienced a higher than average reproductive rate. In addition, in acknowledging that other nearby pairs whose habitats include higher percentages of old forests have experienced lower reproductive rates than the pair in the past three years, Dr. Rosenberg explained that reproductive rates are variable, and could be the product of other effects.

Dr. Rosenberg reasoned that his conclusion as to a detrimental effect on the owls can be made with reasonable certainty because: (1) the Unit is within the owls' home range; (2) the Unit is likely within the owls' core area; (3) the Unit contains portions of preferred old forest; (4) preferred old forests are already very limited in the owls' home range; (5) the owls are selecting the Unit; and (6) studies of other owls indicate that owls in areas with less than 30% older forest perform poorly.

Dr. Rosenberg stated that the telemetry study was descriptive in that it provided the parties with information as to the owls' home range and provided data that is consistent with general knowledge of owl behavior. He stated that using the data from the study, and combining that data with information known regarding the type of habitat and elevation suitable for owls allows researchers to predict future usage.

D. Testimony of Dr. McDonald

Defendant presented the testimony of Trent L. McDonald, Ph.D., a biomatrician employed by Western Ecosystems Technology, Inc., in Cheyenne, Wyoming. Dr. McDonald opined that the following factors are relevant variables in owl habitat selection: elevation, distance to water, distance from the nest, and vegetation type. Dr. McDonald utilized these factors in creating "resource selection function" models, and concluded that, when all the factors that influence owl use are integrated together, the area within the Unit is not significant to the owls.¹

E. Testimony of Dr. Irwin

Defendant presented the testimony of Larry L. Irwin,

¹ The court notes that defendants' experts generally referred to the new Unit boundaries, whereas plaintiffs' experts generally referred to the old Unit boundaries. The court's conclusion is the same regardless of which boundaries are considered.

the Wildlife Program Manager employed by the National Council for Air and Stream Improvement. Dr. Irwin noted that relevant factors include elevation, distance to the nest site, and vegetation types. Dr. Irwin opined that harvesting the Unit will not affect the owls' essential life functions. He reasoned that: (1) there is sufficient suitable habitat even without the Unit; (2) these particular owls have had a relatively high reproductive rate; (3) the Unit is far from the nest site, and therefore, the likelihood of future use is low due to distance and elevation factors; and (4) the only recorded use of the Unit was by the male for foraging, and he will forage elsewhere if the Unit is not available.

Dr. Irwin opined that the threshold amount for suitable habitat for owl survival is 20%. He further noted that the owls are selecting pole young and broad leaf, and thus, these vegetation types must be included as suitable habitat. Based on this premise, he opined that there is over 70% suitable habitat available in the home range, and harvesting the Unit will remove only approximately 5% of the total suitable habitat.

He further noted that from 1991 through 1998, the reproductive rate of the owl pair was .86 per year, as compared to other owls in the coast range which average .65

- .70 per year. Dr. Irwin acknowledged that the Unit has some suitable habitat, but opined that if the Unit was unavailable other resources would still be available. He concluded that clearcutting the Unit would affect the owls' foraging "very minimally."

F. Testimony of Mr. Carson

Defendant presented the testimony of Robert G. Carson, a wildlife biologist for Mason Bruce & Girard, who performs "take" evaluations. He opined that pole young and broad leaf trees are suitable habitat. He reasoned that, according to the telemetry study, pole young trees were used 32% of the time, and broad leaf trees were used 24% of the time. He noted that old forest was used 21% of the time. He opined that the total amount of suitable habitat in the owls' home range is 64%.

He further reasoned that if the owls truly had available only 20% suitable habitat, then the expected reproductive rate would be .4, but that it is much higher. In referring to his table indicating the reproductivity of the owl pair as compared to other pairs in the coast range, the pair ranked 24th out of 133 pairs in high reproductive rates. He concluded that harvesting the Unit would not affect foraging and roosting behavior of the owls.

Mr. Carson acknowledged his previous opinion in

September 1996 that broad leaf was not considered suitable, but explained that this previous opinion was based on a vegetation-based definition, but now that the telemetry study has been completed, a use-based definition of suitable habitat is more appropriate. This use-based definition indicates that broadleaf is suitable habitat. Whereas in 1996 he opined that there was 26% suitable habitat in the owls' home range, now, based on the use-based definition of suitable habitat which indicates that broad leaf should be included, he concluded that there is 65-70% suitable habitat in the owls' home range.

II. Findings of Fact

The court reaches the following findings of fact based on the evidence presented in both the initial and subsequent hearings. The court does not repeat findings already stated in this court's July 28, 1997, order. Unless otherwise indicated due to these findings being made with the benefit of further studies following this court's prior order, this court's prior findings are incorporated herein.

The Unit is within the home range of the owl pair. The 95% Adaptive Kernal home range for the pair is approximately 3602 acres. The size and shape varies from year to year regardless of whether the Unit is cut.

The pair is actually using the Unit, primarily for

foraging by the male owl.

The telemetry study revealed that the owls used older forests in a higher percentage than their availability. Pole young and broad leaf were also used heavily by the owls for foraging and constitute "suitable habitat" for these owls.²

When including pole young and broad leaf as suitable habitat for this owl pair, there is 60-70% suitable habitat located within the pair's actual home range.

The reproductive rate of these owls from 1991 through 1998 was .86 young per year, as compared to other owls in the coast range which average .65 - .7 per year.

III. Standard for Issuance of Permanent Injunction

Under section 9 of the Endangered Species Act ("ESA"), it is unlawful for any person to "take" an endangered or threatened species. 16 U.S.C. § 1538(a)(1). The court previously concluded that the northern spotted owl is a threatened species, and a primary reason for the bird's decline is the loss of suitable habitat. See Order dated July 28, 1997. "Take" includes actions that "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect,

² The court states no opinion as to whether pole young and broad leaf may constitute "suitable habitat" in other circumstances. Rather, the court must consider all circumstances of each individual case to determine what is suitable habitat.

or to attempt to engage in any such conduct." Id.

§ 1532(19). The Secretary of the Interior has further defined "harm" as follows:

"Harm" in the definition of "take" in the Act means an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

50 C.F.R. § 17.3.

The burden is on the government to establish to a reasonable certainty that the proposed harvest will result in significant habitat modification that actually kills or injures the owls by significantly impairing the owls' essential behavioral patterns, including breeding, feeding, or sheltering. See 50 C.F.R. § 17.3

To establish "harm" from habitat modification, plaintiff must show "significant impairment of the species' breeding or feeding habits and prove that the habitat degradation prevents, or possibly, retards, recovery of species." National Wildlife Federation v. Burlington Northern Railroad, Inc., 23 F.3d 1508, 1512-13 (9th Cir. 1994).

The harm that is imminent must be the death or actual injury of an identifiable species. "Mere speculation" is not sufficient; there must be "a definite threat of future

harm to [a] protected species." Burlington, 23 F.3d at 1512 n.8.

Both parties agree that harvesting the Unit will at least affect the male owl's foraging in light of the evidence that the male owl has used the Unit for foraging on various occasions. Defendants correctly note, however, that this interference, alone, is not enough to satisfy the ESA. Rather, plaintiff must also prove by a preponderance of the evidence that this interference will "actually kill[] or injure[]" the owls. 50 C.F.R. § 17.3.

IV. Conclusions of Law

Plaintiff has failed to satisfy its burden of establishing to a reasonable certainty that harvesting the Unit will result in significant habitat modification that would actually kill or injure the owls by significantly impairing the owls' essential behavioral patterns, including breeding, feeding, or sheltering. The telemetry study indicates that this owl pair uses pole young and broad leaf trees for foraging throughout the home range. Although the study indicates that the pair used, and possibly even selected, old forest for foraging, plaintiff has failed to establish that the old forest in the Unit is essential to the owl's survival. The court is not persuaded that

removing the Unit as a source of foraging will actually kill or injure the owls.

Unlike in Marbled Murrelet v. Babbitt, 83 F.3d 1060 (9th Cir. 1996), wherein the Ninth Circuit held that harvesting the proposed area "would likely harm marbled murrelets by impairing their breeding and increasing the likelihood of attack by predators on the adult murrelets as well as the young," id. at 1067-68, here, the evidence indicating that the owls also heavily used other old and young timber areas, outside the Unit, for foraging and other activities, and that the owls maintain relatively high reproductive rates, is persuasive that harvesting the Unit will not harm the owl pair.

V. Conclusion

For the foregoing reasons, plaintiff's motion for permanent injunction [#109] is denied.

IT IS SO ORDERED.

DATED this ____ day of March, 2000.

United States District Judge