PERFORMANCE REPORT

SECTION 6

ENDANGERED SPECIES ACT

FEDERAL AID PROJECT E-21-7

Red-cockaded Woodpecker (Picoides borealis) Recovery
on the McCurtain County Wilderness Area (MCWA)

APRIL 1, 1998 - MARCH 31, 1999

ANNUAL PERFORMANCE REPORT

State: Oklahoma **Project No:** E-21-7

PROJECT TITLE: Red-cockaded woodpecker (RCW) (Picoides borealis) recovery on the McCurtain County Wilderness Area (MCWA)

I. PROGRAM NARRATIVE OBJECTIVE

Recover the RCW population on the MCWA to 45 active clusters by implementing procedures outlined in the MCWA Implementation Plan

II. JOB PROCEDURES

1. Monitoring

a. Locate, tag, and map new cavity trees within 300 yards of active clusters.
b. Determine the status of each cavity tree and cluster, especially during the nesting period.
c. Band adult and nestlings to obtain data on production, dispersal, and mortality and to aid in identifying single bird clans that would benefit from augmentation.

2. Cluster Stand Management

a. Reduce hardwood midstory and understory trees within 10 acre blocks adjacent to active clusters.
b. Control the hardwood midstory within clusters by cutting and fire (controlled burns will be done under the Wildlife Restoration Act).

3. Recruitment Stand Management

Identify, mark, and control hardwoods within blocks of suitable habitat within ½ mile of active clusters.

4. Corridors

When needed and feasible, maintain or develop corridors among clusters and recruitment stands.

5. Restrictors and Predator Guards

a. Place restrictors on RCW cavities to prevent enlargement by other woodpeckers and rehabilitate enlarged cavities.
b. Install predator guards on all active cavity trees.
c. Place squirrel guards on trees where flying squirrels have taken over cavities.

6. Artificial Cavities

Install cavity inserts in active clusters to provide at least 5 usable cavities at each site. Install 3 inserts at recruitment sites. When inserts at recruitment stands are activated, install 2 additional inserts.

7. Augmentation

Identify single bird clans and move subadults to the sites.

III. SUMMARY OF PROGRESS

1. Clusters

The number of active clusters decreased from 12 to 11 during the reporting period (Table 1). Cluster 16, which was briefly reactivated by 2 resident birds in 1997, became inactive again in 1998. Clusters 5 and 137 each contain a single bird.

2. Cavity Trees

Cavities at active clusters were checked at intervals of approximately 4 weeks throughout the year and cleaned and repaired as needed. Twenty-nine cavities at active clusters are natural and 60 are inserts (Table 1). During the year, no cavity trees were

lost to southern pine beetle infestation, but 4 were lost to wind throw and lightening.

3. Restrictors and Predator Guards

All usable natural cavities at active and inactive clusters, except 1 at cluster 105, have been restricted. The 1 unrestricted cavity is in a tree that cannot be safely climbed. All active cavity trees have been fitted with a 5 foot section of aluminum flashing-predator guard. When a cavity tree at a recruitment stand or inactive cluster showed RCW activity, a predator guard was installed.

4. Population

During the 1998 nesting period, 9 nests (Table 2) were located, and these contained 33 eggs. Eight of the nesting attempts were successful and hatched 22 nestlings. The 4 eggs at cluster 112 disappeared prior to the hatching date. The cause of this nest loss is unknown. Eleven nestlings were banded and 20 fledged. Nests were rechecked 2 days subsequent to banding to assure that the procedure had not induced injury or mortality. All banded nestlings were active and unharmed.

The number of nestlings fledged was estimated by checking the nests 1 week prior to the fledging date. Eight of the 20 fledglings were recaptured and colored leg bands added (Tables 2 and 3).

5. Stand Management

Hardwood sprouts were cut within 50 feet of cavity trees at active clusters. Approximately 4,728 ac in compartments 1, 2, 3, 65, and 9 were burned in April 1998. Another 800 ac of adjacent U.S. Forest Service land was included in the burn.

Three cavity trees were lost to wind throw and breakage and one to lightening in 1998. Beetle infestations were scattered over the area but no cavity trees were infested. Cooperative monitoring of the southern pine beetle population with the Oklahoma Division of Forestry indicated that the beetle population remain relatively low

and the predator population high. Beetle monitoring will continue in 1999.

Analyses of the permanent vegetative plots in the burn compartment indicate the changes in forest structure and composition from the controlled burning regimen are small. Sampling of the plots will be discontinued until sufficient time has elapsed to make the changes more evident.

6. Artificial Cavities

During the period, 5 inserts were installed at active clusters and 8 at 2 new recruitment stands.

7. Corridors.

Development of corridors to connect clusters and recruitment stands and improve foraging habitat continued. Approximately 2.0 miles of corridors (200 feet wide) were constructed along ridges on the area's east and west sides.

8. Augmentation

Five pairs of juvenile RCW's were trapped at the Sam Houston NF in October, transported at night to the area, and released at prepared recruitment stands (Table 4). At least 6 new cavities were activated after the release, although some have subsequently become inactive. The success of the translocations will not be known for some time. During 1998, 3 RCW's, released in 1996 and not seen since then, were trapped at established clusters.

9. Other Activities

No road or trail construction occurred on the area. Approximately 5 miles of interior roads were graded. One controlled deer hunt and one controlled turkey hunt were conducted. Monitoring of the clusters in the hunt areas indicated no adverse effects to the RCW's.

IV CONCLUSIONS

Monitoring of clusters will continue through out the year. If a single bird cluster is found, attempts will be made to move a surplus RCW from a donor population to the site. Establishment of new clusters by translocating juvenile RCW pairs from donor populations will also continue. Translocatons are important in maintaining and increasing not only the population's size but also its genetic diversity.

Although southern pine beetle activity at this time is low to moderate, monitoring of the beetle population on the area will continue.

V. DEVIATIONS

None.

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VII. Date: March 12, 1999

VIII. Approved by: Harold E. Namminga,
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TABLE 1. CAVITY STATUS AT ACTIVE CLUSTERS

	NATURAL CAVITIES		INSERTS	
CLUSTER	N	A	N	A
137	1	0	7	1
112	3	2	6	2
111	5	3	6	1
109	3	1	4	2
2	0	0	5	3
105	2	0	5	4
5	0	0	5	1
107	4	2	4	1
31	5	3	6	1
32	1	1	8	3
12	5	3	4	1
TOTAL	29	15	60	20

N= NUMBER CAVITIES
A= NUMBER ACTIVE

TABLE 2. MCWA NESTING RESULTS FOR 1998

CLUSTER	INITIATION	EGG NUMBER	NUMBER HATCHED	* NESTLINGS BANDED	NESTLINGS FLEDGED	JUVENILES BANDED
2	5/11	4	2	1	2	1
137	5/4	4	2	1	2	0
112	4/22	4	0**	0	0	0
111	4/27	4	3	2	3	1
109	0	0	0	0	0	0
105	5/4	3	3	1	3	2
107	5/4	4	4	1	3	0
31	4/28	4	4	3	3	1
32	4/24	3	2	2	2	2
12	5/1	3	2	2	2	1
TOTAL		33	22	11	20	8

* UNBANDED NESTLINGS COULD NOT BE EXTRACTED IN A SAFE TIME PERIOD

** EGGS DISAPPEARED PRIOR TO HATCHING DATE

TABLE 4. MCWA TRANSLOCATIONS 1998

Band No.	Date of Move	Population moved from	Age (months)	Sex
1581-24251	10/5/98	SHNF	5	F
1581-24930	10/5/98	SHNF	5	F
1581-24236	10/8/98	SHNF	5	F
8101-27067	10/8/98	SHNF	5	F
1631-60209	10/8/98	SHNF	5	F
1631-60242	10/5/98	SHNF	5	M
8101-27071	10/5/98	SHNF	5	M
1581-24279	10/8/98	SHNF	5	M
1581-24160	10/8/98	SHNF	5	M
8101-27064	10/8/98	SHNF	5	M

SHNF = SAM HOUSTON NATIONAL FORES

TABLE 3. MCWA TRAPPING AND BANDING RECORDS 1998

CLUSTER TRAPPED	BAND NUMBER	COLORS	AGE WHEN TRAPPED	SEX	SITE FIRST BANDED	YEAR FIRST BANDED	AGE WHEN BANDED
2	8081-84834	LbA YLg	A	F	TX	96	J
2	8081-99814	WM LbA	A	M	2	97	A
2	8081-99827	WA PY	J	F	2	98	J
12	49277	A DgY	A	F	32	95	J
12	8081-99819	WA PP	J	F	12	98	J
31	8081-32571	LbW OA	A	M	LO	96	J
31	8081-99813	WLg LbA	A	M	32	97	J
31	8081-99823	YPu OA	J	M	31	98	J
32	49280	OA BlLg	A	F	31	95	J
32	8081-99815	YW OA	J	M	32	98	J
105	49233	O LgA	A	M	107	92	A
105	8081-84869	LbA YW	A	F	TX	96	J
105	8081-99825	YP OA	J	M	105	98	J
105	8081-99829	WA PPu	J	F	105	98	J
107	49209	LgA WO	A	F	21	92	J
107	49258	PDb PA	A	M	111	93	J
109	49288	PA LbY	A	F	105	96	J
109	8081-99812	WY LbA	A	M	109	97	J
111	49244	BlY LbA	A	F	109	93	J
111	49287	LbA BlY	A	M	109	96	J
111	8081-99817	WA PW	J	F	111	98	J
112	49271	A Lb	A	F	109	94	J
112	49286	PA LbW	A	F	109	96	J
112	8081-32467	BlY MA	A	M	TX	95	J
137	8081-99816	YY OA	J	M	32	98	J