

# Wildlife on Conservation Reserve Program (CRP) Lands

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## Background

In 2003 numerous landowners and farmers in eastern Washington allowed some of their lands to be used for wildlife research related to the Conservation Reserve Program (CRP). We are grateful for their interest in CRP, and for their cooperation in this study. This report provides a brief update on the progress of that research.

Sagebrush-grassland habitat (shrub-steppe) historically was the dominant habitat in eastern Washington. Today, less than 40% of this shrub-steppe remains, and much of it fragmented and/or isolated from other similar habitats. Loss of once extensive shrub-steppe communities has greatly reduced the habitat available to a wide range of associated wildlife including sage-grouse, sharp-tailed grouse, sage thrasher, loggerhead shrike, Brewer's sparrow, sage sparrow, white-tailed jackrabbit, sagebrush vole, and sagebrush lizard.

The CRP is currently the only large-scale effort to restore habitat that may be used by shrub-steppe wildlife in the Columbia River Basin. Administered by the US Department of Agriculture, this voluntary program pays farmers to take farmland out of production for periods of at least 10 years to achieve conservation objectives including reduction of soil erosion and provision of wildlife habitat. In Washington alone, over 1 million acres of converted farmland has been planted to native and non-native grasses under the CRP.



Because the CRP has enormous potential to provide habitat for many shrub-steppe species, we designed a study to examine CRP in Douglas, Lincoln, Grant, and Adams counties. We selected 32 CRP fields to compare with 16 areas of native shrub-steppe. The specific goals of the research are to: 1) compare wildlife populations in CRP lands with those in nearby native shrub-steppe and 2) compare wildlife among CRP fields with different characteristics. This is the first study of this type in the Columbia Basin.

## Preliminary Results

### Birds



We counted 2394 individual birds on the 48 study areas in 2003. Savannah sparrows were the most abundant in new CRP fields (planted in late 1990s), whereas horned larks were the most abundant in old CRP (planted in late 1980s). Brewer's sparrows and western meadowlarks were the most abundant species in shrub-steppe sites.

*Birds counted during surveys of 48 study areas in Douglas, Lincoln, Grant, and Adams counties, Washington, 2003.*

Species	New CRP	Old CRP	Shrub-steppe	Total
Horned lark	203	225	95	523
Savannah sparrow	260	156	52	468
Grasshopper sparrow	200	157	26	383
Brewer's sparrow	12	66	213	291
Western meadowlark	50	43	175	268
Vesper sparrow	45	76	131	252
Brown-headed cowbird	1	2	44	47
Sage thrasher	1	3	35	39
Brewer's blackbird	5	3	27	35
Sage sparrow	0	2	31	33
Lark sparrow	0	0	12	12
Cliff swallow	0	8	3	11
Mourning dove	1	2	6	9
Red-winged blackbird	0	0	5	5
Loggerhead shrike	0	0	4	4
Black-billed magpie	0	0	3	3
House finch	0	0	3	3
Ring-necked pheasant	0	1	1	2
Rock wren	0	0	2	2
Say's phoebe	0	0	2	2
Common nighthawk	0	0	1	1
Long-billed curlew	1	0	0	1
Total	779	774	871	2394

We located and monitored the fate of 341 nests on the study areas. The most common nests found in shrub-

steppe and old CRP plots were those of the Brewer's sparrow; savannah sparrow nests were found most often in new CRP plots. Of interest, nests of many shrub-steppe birds (including sage sparrow, Brewer's sparrow, vesper sparrow, sage thrasher, and burrowing owl) were found in CRP fields when sagebrush was present.

*Nests found on 48 study areas in Douglas, Lincoln, Grant, and Adams counties, Washington in 2003.*

Species	New CRP	Old CRP	Shrub-steppe	Total
Horned lark	18	17	6	41
Savannah sparrow	27	20	14	61
Grasshopper sparrow	1	5	1	7
Brewer's sparrow	9	41	66	116
Western meadowlark	3	4	9	16
Vesper sparrow	10	19	29	58
Sage thrasher	0	6	7	13
Sage sparrow	0	2	5	7
Lark sparrow	0	0	1	1
Mourning dove	0	2	10	12
Eastern kingbird	0	0	1	1
Killdeer	0	0	1	1
Burrowing owl	1	0	0	1
Say's phoebe	0	0	1	1
Common nighthawk	0	0	4	4
Northern harrier	0	1	0	1
Total	69	117	155	341

## Reptiles and Amphibians



We observed 95 individuals representing 9 species. The most common, and most widely distributed reptile, was the short-horned lizard. It was also common in CRP sites. Western rattlesnakes were also common, but only on a few sites. Only 4 individual amphibians (Great-Basin spadefoot toad, long-toed salamander, and 2 tiger salamanders) were found.

*Frequency of occurrence of reptiles and amphibians on study areas in Washington in 2003.*

Species	New CRP	Old CRP	Shrub-steppe	Total
Short-horned lizard	4	24	17	45
Western rattlesnake	1	2	19	22
Western skink	0	0	8	8
Gopher snake	1	1	5	7
Racer	0	0	6	6
Terrestrial garter snake	1	1	1	3
Spadefoot toad	0	0	1	1
Tiger salamander	0	0	2	2
Long-toed salamander	0	0	1	1
Total	7	28	60	95

## Small Mammals



We captured 2304 small mammals representing 10 species in 2003. Three species, the deer mouse, Great Basin pocket mouse, and western harvest mouse made up 90% of the captures. Other species captured were the least chipmunk, sagebrush vole, montane vole, long-tailed vole, northern pocket gopher, Merriam's shrew, and vagrant shrew.

Three rodents (deer mouse, western harvest mouse, and sagebrush vole) appeared to be more abundant in CRP than in shrub-steppe. In contrast, least chipmunks were captured mainly in shrub-steppe habitat. The Great Basin pocket mouse had a similar number of captures in all habitat types. The other species were too uncommon to evaluate.

## Summary

CRP, regardless of age, appears to be supporting substantial numbers of birds, reptiles, amphibians, and mammals. Although shrub-steppe appears to have the highest diversity of wildlife, CRP supports a large number of species when it is old, and/or it contains shrubs. Because it is clear that there may be additional variability associated with annual variation in weather and with habitat configuration, it will be important to augment these results with additional research in 2004.

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