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Sagebrush Ecosystem Council
Ex-officio Members
October 1, 2014

Be very careful and do not jeopardize all our good permittees, wildlife people, and the livestock industry. If Ted lists the sage grouse as threatened or endangered, it will be a blanket directive and will punish a lot of good working people. The general welfare of the State depends on agriculture and livestock people and it will NOT help sage grouse. It will restrict management. We have the wagon before the horse by listing the bird now. First we should scientifically and technically [with no political interference], identify and prove on the ground all circumstances affecting livestock and sage grouse. First we should find out and identify what is really causing the fluctuation of ups and downs. Is it predation, habitat loss, weather, or what? Before listing, I think Ted should issue a directive to BLM and Forest Service to adjust any true problems they find. They know the allotments and can work with the permit holders. The BLM and FS will need more additional finances and certified personnel to do the job. That has been our problem for many years. Just think about all this before making any rash decisions. There are many things you can do to help the sage hen besides closing our allotments and listing the Bi-State bird.

Thank You.

Fred Fulstone

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Governor, State of Nevada & Sagebrush Ecosystem Council
October 1, 2014
Sagebrush Ecosystem Council Meeting
Carson City, Nevada

Comments by Fred Fulstone

Mr. Ted Koch, of the USFWS, representing Nevada, has listed the Greater Sage Grouse of the Bi-State and all of Nevada for possible listing on the National Register as a "threatened" species or possibly "endangered" species. This has been done by a court order because of a lawsuit by ten or more anti-grazing special interest environmental groups. This is NOT what a majority of the people want. It is a political step to remove all grazing from the public lands and the environmental groups are the catalyst. It should be based on true facts to protect the sage grouse and to protect the economy of the state.

As to the sage grouse in the Bi-State area, the numbers are rising and favorably. [See exhibit No. 1] Today we have more total numbers of sage grouse on the ground than have been recorded. As reported in several papers such as the research article entitled, "The importance of with-in year repeated counts and the influence of scale on long-turn monitoring of sage grouse", by Fedy/Aldridge 2011, they question the effectiveness of current policies on counting sage grouse. Quotes such as, "These lek count data have been used to assess long term population trends and for multiple mechanistic studies. However, some studies have questioned the efficiency of lek counts to accurately identify population trends. In response, monitoring protocols have been changed to have a goal of counting lek sites multiple times within a season.

I have observed however, that when counting leks with 50 or more males, the populations seem to fluctuate a lot because the same males can visit different leks in one season and be counted more than once. If males attend as reported between March and June, and the females attends for about 2 to 3 days, find their mate, then leave, then actual lek counts should be through March and June also. Monitoring should also be done more than once as to nest success and brood rearing to get a closer count as to how many actually survive. The females can return to a lek if the first mating was not successful, so the counts can be off. If the bird is actually the goal here, then knowing the real numbers should be #1 on the board. Fedy and Aldridge also suggested that a large sample of individual leks is preferable to multiple counts of a smaller sample. [2011]

Best available science means something different to the agencies than it does to the livestock people or the environmental people. As stated by Williams, et al 2002, "an accurate assessment of population trends is fundamental to population biology and important for effective animal conservation and management. Population monitoring is essential to understanding population trends as is a cornerstone in the management of wildlife resources. The agencies science does not even come close to matching

what is actually seen on the ground. The agencies will not recognize, however, the data collected by anyone other than their sources as fact, because it does not always agree with what theirs says and does not meet their agenda or goal.

The government agencies have been using the leks to count sage grouse, but until they actually know where they are, it is hard to get a real number. There are still many that have not been found. They must get out on horseback and get into the remote areas if they want to identify all the leks of sage grouse. They say they get counts from airplanes, but how many do you think they can accurately see when the birds would have a tendency to hide. In the last few years they have found at least 4 new leks.

In the 2011 Final Performance report of the Nevada Sage Grouse Conservation Program document, page 6, it shows on the graph that refers to the Bi-State population planning area, that there were about 97 known leks. It also reports that of these leks only 36 active leks were counted. If only 1/3 of the leks are counted, even Peter Coates model would not be correct as to population. How can you really know how many birds you actually have?

If you really want more birds, then you also have to stop hunting them. Not just in one area, but the whole state. In the same document, the 2011 Final Performance Report, Nevada Sage Grouse Conservation Program, it shows on page 12 and 13, that in 2010 the wings collected from hunters on harvest of sage grouse, that 663 of the wings were from adult females and 657 wing were from juvenile females. That means that 1320 females were removed from the gene pool to make money for NDOW. If a nesting female has about 5 eggs that means you have removed about 6600 potentially new birds from the system.

You must also control predators, such as coyotes and ravens, in order to protect the birds. It has been proven by Peter Coates that predation accounts for over half of the loss of eggs and hatchlings.

It is not the habitat that is the biggest risk. As we know there are millions of acres of the short black sage that have never been touched. The black sage is their most dependable diet on the public range. They depend on it for the fall, winter, and early spring feed. The black sage has long roots of a foot or more, and is generally available even in drought years as we see now. The sage grouse need the private irrigated lands to complete their yearly grazing cycles. That is where the sage grouse is affected the most. Here in the Bi-State area, we have had a terrific drought and are still in it. Our reservoirs are empty and there is no water available to irrigate those fields for the birds. We also have no water to irrigate our private lands. I would suggest that the agencies drill a few wells in strategic points to help to save the birds. Work with the private land owners. Don't try to change our grazing cycles unless absolutely necessary. I have tried to drill wells to help, but was unable to get permission from the agencies to do so. The NRCS has offered to help, but the agencies are not.

In the past few years we have worked with the NRCS, and have removed thousands of pinion and juniper pines. It has been a good start to help the sage grouse and other natural resources. The NRCS and BLM have re-seeded hundreds of acres of burned land which will certainly help in the future.

I think it is important to remember that the ranchers and trappers are the ones who founded this land and helped the wildlife flourish in the first place. The grazers brought in their animals to graze and helped the land regenerate itself faster to increase food for ALL the species that need it to survive. Somehow, I think that people have forgotten where their food comes from and where the clothes they wear comes from. Yes, they buy them in a store, but do they really know it comes from people like me and others like me right here in Nevada who depend on the ranges for a way to make their lives easier. I do not make a million doing it, but it is my way of life and I hope with all my heart that I will have that life to give to my daughter and my grandson and my great grandchildren. We have fed and protected these birds our whole lives, and now you want to stop us. WHY, if you are really interested in saving the bird.

Our government is slowly reversing back to Stalinism, which caused starvation in Russia and demise of the population. A lot of our people today don't know that Stalin killed 20 million of the countries farmers because they would not comply with his demands. Don't forget about Waco, Texas, Ruby Ridge, and Bundy and the onslaught at Gold Butte. You conveniently forget about the taking of permits from Gardner, Hage and FIM. Who knows how many others were wronged in the past and will be in the future? You want to destroy mankind in order to save every little creature, which is impossible. Former Assistant Secretary of the Interior, Craig Manson, was right when he said, " the Endangered Species Act is broken and should no longer be used to give endangered plants and animals priority over human needs.

Fred Fulstone

Fred Fulstone for FIM Corp

PLANNINGUNIT	PMU_NAME	LEKCOMPLEX	LEKNAME	LEKID	TRENDLEK	LASTSURVEY	ENAD83	NNAD83	2013	2012	2011	2010	2009	2008
Bi-State	Bodie/Mount Grant	Aurora	Aurora Peak	MOGR-012	TRUE	2012	334618	4238349	10	47	52		14	15
Bi-State	Bodie/Mount Grant	Baldwin	Baldwin Canyon	MOGR-003	FALSE	2012	337318	4255299		0	0	26		0
Bi-State	Bodie/Mount Grant	China Camp	China Camp 1	MOGR-008	FALSE	2012	326166	4247409		0	0		0	
Bi-State	Bodie/Mount Grant	China Camp	China Camp 2	MOGR-007	TRUE	2012	326418	4250196		0	9		4	4
Bi-State	Desert Creek/Fales	Desert Creek	Desert Creek 01	DCFA-015	FALSE	2011	299299	4259991			43			9
Bi-State	Desert Creek/Fales	Desert Creek	Desert Creek 02	DCFA-006	TRUE	2012	299696	4264607	7	37	26	23	26	27
Bi-State	Desert Creek/Fales	Desert Creek	Desert Creek 03	DCFA-005	FALSE	2009	299234	4266622					0	
Bi-State	Desert Creek/Fales	Desert Creek	Desert Creek 06	DCFA-004	FALSE	1900	297823	4264636						
Bi-State	Desert Creek/Fales	Desert Creek	Desert Creek 09	DCFA-001	FALSE	2003	299237	4269603						
Bi-State	Desert Creek/Fales	Desert Creek	Desert Creek Pasture	DCFA-002	FALSE	2012	299299	4269390		28				
Bi-State	Bodie/Mount Grant	Mt. Grant	Grant 1	MOGR-006	FALSE	2012	342702	4275782	0	12	0		0	0
Bi-State	Bodie/Mount Grant	Mt. Grant	Grant 2	MOGR-009	FALSE	2012	340036	4269679	30	0	0		0	
Bi-State	Bodie/Mount Grant	Mt. Grant	Grant 3	MOGR-010	FALSE	2012	340419	4269379	2	0	20		0	
Bi-State	Bodie/Mount Grant	Mt. Grant	Grant 4	MOGR-001	FALSE	2012	340118	4269399	0	66	0		0	
Bi-State	Bodie/Mount Grant	Mt. Grant	Lapon	MOGR-011	FALSE	2012	342066	4269975	6	12	0		0	
Bi-State	Bodie/Mount Grant		Masonic	MOGR-034	FALSE	2012	316609	4269253		6				
Bi-State	Bodie/Mount Grant	Mt. Hick	Mt Hick	MOGR-005	FALSE	2012	342803	4237315		0				
Bi-State	Bodie/Mount Grant		Mudspring	MOGR-004	FALSE	2011	339219	4249199			0			
Bi-State	Bodie/Mount Grant	Baldwin	Nine Mile Flat	MOGR-002	FALSE	2012	339632	4259992		52	13			
Bi-State	Bodie/Mount Grant	Baldwin	Nine Mile Flat 2	MOGR-032	FALSE	2011	332676	4259979	27		16	26		
Bi-State	Bodie/Mount Grant	China Camp	Rough Creek	MOGR-033	FALSE	2012	326182	4259994		27				
Bi-State	Desert Creek/Fales	Sweetwater	Sweetwater 1	DCFA-014	FALSE	2012	309801	4267899		0		3		
Bi-State	Desert Creek/Fales	Sweetwater	Sweetwater 1 (Bat)	DCFA-018	FALSE	2004	309731	4269986						
Bi-State	Desert Creek/Fales	Sweetwater	Sweetwater 2	DCFA-003	TRUE	2010	309791	4269221	0			0	4	5
Bi-State	Desert Creek/Fales	Desert Creek	Taylor	DCFA-021	FALSE	2012	303294	4269127	6	24				
Bi-State	Desert Creek/Fales	Wichman Bluff #1	Wichman Bluff 1	DCFA-016	FALSE	1900	325006	4270406						
Bi-State	Desert Creek/Fales	Wiley Ditch	Wiley Ditch 1	DCFA-019	FALSE	2012	305646	4269333		0	6	7	0	
Bi-State	Desert Creek/Fales	Wiley Ditch	Wiley Ditch 2	DCFA-010	FALSE	2012	304237	4269669	18	56	33	23	14	
Bi-State	Desert Creek/Fales	Wiley Ditch	Wiley Ditch 3	DCFA-011	FALSE	2012	305699	4269066	5	19	7	17	6	
Bi-State	Desert Creek/Fales	Sweetwater	Wiley Ditch west	DCFA-020	FALSE	2010	306162	4268777				9		
						Number of Leks Counted:			12	20	17	9	14	7
						Average attendance:			9.2	19.2	13.3	14.8	4.6	8.1

Exhibit no 1

Bi-State Lek Attendance (Nevada Portion)

Year	Avg Attendance
1998	7.5
1999	13.7
2000	20.3
2001	6.8
2002	7.4
2003	12.8
2004	14.0
2005	13.8
2006	27.0
2007	14.1
2008	8.1
2009	4.8
2010	14.8
2011	13.3
2012	19.2
2013	9.2

NO2. 2 pages.

Peter Coates - Virginia Hills Report 9-2013

Backup for depredation of Sage Hen. 2 pages.

Articles

Greater Sage-grouse Nest Predators in the Virginia Mountains of Northwestern Nevada

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Abstract

Greater sage-grouse (*Centrocercus urophasianus*; hereafter, sage-grouse) populations have declined across their range due to the loss, degradation, and fragmentation of habitat. Habitat

alterations can lead not only to vegetative changes, but to shifts in animal behavior and predator composition that may influence population vital rates such as nest success. For example, common ravens (*Corvus corax*) are sage-grouse nest predators and raven abundance is positively associated with human-caused habitat alterations. Because nest success is a central component to sage-grouse population persistence, research that identifies factors influencing nest success will better inform conservation efforts. We used videography to unequivocally identify sage-grouse nest predators within the Virginia Mountains of northwestern Nevada, USA from 2009 – 2011 and used maximum likelihood to calculate daily probability of nest survival. In the Virginia Mountains, fires, energy exploration, and other anthropogenic activities have altered historic sage-grouse habitat. We monitored 71 sage-grouse nests during the study, placing video cameras at 39 nests. Cumulative nest survival for all nests was 22.4 % (95% CI, 13.0% – 33.4%), a survival rate that was significantly lower than other published results for sage-grouse in the Great Basin. Depredation was the primary cause for nest failure in our study (82.5%), and common ravens (*Corvus corax*) were the most frequent sage-grouse nest predator accounting for 46.7% of nest depredations. We also successfully documented a suite of mammalian and reptilian species depredating sage-grouse nests, including some predators never previously confirmed in the literature to be sage-grouse nest predators (i.e., bobcat and weasel). Our results indicate that, within the high elevation, disturbed habitat of the Virginia Mountains, sage-grouse nest success may limit the sage-grouse population. We recommend that management actions for the Virginia Mountains be designed to restore habitat to increase sage-grouse nest success and decrease anthropogenic subsidies of ravens.

Keywords: *Centrocercus urophasianus*, common raven, nest survival, Nevada, sage-grouse, video-monitoring

No 3 Please read lower right USFWS says predators take 50% of Sage Hen. Exhibit 43

and the finding is to be published promptly in the Federal Register. If we find that substantial information was presented, we are required to promptly commence a review of the status of the species involved, if one has not already been initiated under our internal candidate assessment process.

The processing of this petition conforms with our Listing Priority Guidance published in the Federal Register on October 22, 1999 (64 FR 57114). The guidance clarifies the order in which we will process rulemakings. The highest priority is processing emergency listing rules for any species determined to face a significant and imminent risk to its well-being. Second priority is processing final determinations on proposed additions to the lists of endangered and threatened wildlife and plants. Third priority is processing new proposals to add species to the lists. The processing of administrative petition findings (petitions filed under section 4 of the Act) is the fourth priority. The processing of this 90-day petition finding is a fourth priority, and is being completed in accordance with the current Listing Priority Guidance.

We have made a 90-day finding on a petition to list the western sage grouse [illegible] in Washington. The petition, dated May 14, 1998, was submitted by the Northwest Ecosystem Alliance and the Biodiversity Legal Foundation, and was received by us on May 22, 1998. The petition requested the listing of western sage grouse in Washington as threatened or endangered. The letter clearly identified itself as a petition and contained the names, signatures, and addresses of the petitioners. Accompanying the petition was supporting information relating to the taxonomy, ecology, and past and present distribution of the species, as well as the threats faced by the western sage grouse in Washington.

The petitioners requested listing for the Washington population of western sage grouse and not the species rangewide. We consider this request appropriate because, although we do not base listing decisions on political subdivisions except international boundaries, we can consider a population of a vertebrate species or subspecies as a listable entity under the Act if the population is recognized as a distinct population segment (DPS) (61 FR 4722). We can also expand the scope of our review of petitions to the species rangewide, should expansion be appropriate based on our knowledge of the available information.

The information regarding the description and natural history of sage grouse, below, has been condensed from the following sources: Aldrich 1963, Johnsgard 1973, Connelly *et al.* 1988, Fischer *et al.* 1993, Drut 1994, Washington Department of Fish and Wildlife (WDFW) 1995, Washington Sage and Columbian Sage Grouse Workshop (WSCSGW) 1995 and 1996, and Schroeder *et al.* 1999a.

Sage grouse, also known as sage fowl, spine-tailed grouse, fool hen, cock-of-the-plains, and sage chicken, are galliformes (chicken-like, ground-nesting) birds, and are the largest North American grouse species. Adult males range in size from 68 to 76 centimeters (cm) (26 to 30 inches (in)) and weigh between 2 and 3 kilograms (kg) (4 and 7 pounds (lb)); adult females range in size from 48 to 58 cm (19 to 23 in) and weigh between 1 and 2 kg (2 and 4 lb). Males and females have dark grayish-brown body plumage with many small gray and white speckles, fleshy yellow combs over the eyes, long pointed tails, and dark-green toes. Males also have blackish chin and throat feathers, conspicuous phylloplumes (specialized ornithic feathers) at the back of the head and neck, and white feathers around the neck and upper belly forming a ruff. During breeding displays, males also exhibit olive-green apteria (fleshy bare patches of skin) on their breasts.

Sage grouse depend on a variety of shrub steppe habitats throughout their life cycle, and are particularly tied to several species of sagebrush (*Artemesia* spp). Adult sage grouse rely on sagebrush throughout much of the year to provide roosting cover and food, and depend almost exclusively on sagebrush for food during the winter. If shrub cover is not available, they will roost in snow burrows. While average dispersal movements are generally less than 16 kilometers (km) (21 miles (mi)), sage grouse may disperse up to 160 km (100 mi) between seasonal use areas. Sage grouse also exhibit strong site fidelity (loyalty to a particular area), and are capable of dispersing over areas of unsuitable habitat.

A wide variety of forb (any herb plant that is not a grass) species are used as forage by adult sage grouse from spring to early fall, and hens require an abundance of forbs for pre-laying and nesting periods. An assortment of forb and insect species form important nutritional components for chicks during the early stages of development. Sage grouse typically seek out more mesic (moist) habitats that provide greater amounts of succulent forbs and insects during the summer and early fall. Winter habitat use varies based upon snow accumulations and elevational gradients, and sage grouse likely choose winter habitats based upon forage availability.

During the spring breeding season, male sage grouse gather together and perform courtship displays on areas called leks, primarily during the morning hours just after dawn. Leks consist of patches of bare soil, short grass steppe, windswept ridges, exposed knolls, or other relatively open sites, and they are often surrounded by more dense shrub steppe cover, which is used for roosting or predator evasion during the breeding season. Leks range in size from less than 0.4 hectare (ha) (1 acre (ac)) to over 40 ha (100 ac), contain several to hundreds of males, and are usually situated in areas of high female use. Leks used over many consecutive years (historic leks) are typically larger than, and often surrounded by, smaller and less stable satellite leks. Males defend individual territories within leks and perform elaborate displays with their specialized plumage and vocalizations to attract females for mating. Relatively few, dominant males account for the majority of breeding on a given lek.

After mating, females may move a maximum distance of 26 km (22 mi) depending on the availability of suitable nesting habitat, and typically select nest sites under sagebrush cover. Nests are relatively simple and consist of scrapes on the ground, which are sometimes lined with feathers and vegetation. Clutch sizes range from 6 to 13 eggs, and nest success ranges from 10 to 83 percent. Chicks begin to fly at 2 to 3 weeks of age, and broods remain together for up to 12 weeks. [illegible] juvenile mortality occurs during nesting and the summer [illegible] and 15 [illegible] shrub canopy and grass cover provide concealment for sage grouse nests and young, and may be critical for reproductive success.

Sage grouse typically live between 1 and 4 years and have an annual mortality rate or mortality of 60 to 80 percent, with males generally having a higher survival rate than females. Up to 80 percent of all adult sage grouse mortality is caused by predation. Avian [illegible] (e.g., [illegible] eagles, and ravens) and [illegible] (e.g., [illegible] coyotes, bobcats, and [illegible]) are the most common predators.

Prior to European expansion into western North America, sage grouse (*Centrocercus urophasianus*) were believed to occur in 16 States and 3 Canadian provinces (Schroeder *et al.* 1999a), although their historic status in Kansas and Arizona is unclear (Colorado Sage Grouse Working Group

NO 4 Support for Oct 1 – 2014 paper
Lots of predator Control there!

EXHIBIT #5

seemingly been abandoned.

Other known leks within the Nevada portion of this PMU exhibit intermittent activity. These leks are monitored during each breeding season, however, data for many of these leks are sparse. The potential that there are other undiscovered leks within this PMU is fairly high, especially within the upper elevations of the Pine Grove Hills. More intensive helicopter survey work scheduled in 2012 may lead to the discovery of these leks.

Desert Creek – Fales PMU Population Trend - California Portion. The Fales portion of the Desert Creek-Fales PMU is located in northern Mono County in the general vicinity of Sonora Junction near the intersection of Highways 395 and 108. The Fales breeding complex includes two active and two inactive trend leks located on Burcham and Wheeler Flats. In addition, one lek occurs on Jackass Flat located in the extreme northeast corner of Mono County near the CA-NV state line. Due to the remoteness and inaccessibility of the area, this lek was only monitored in 2003 and 2004.

Initial population monitoring efforts in the Fales area began in 1953 with the counting of Lek 1. Leks 2 and 3 were added to the survey in 1957 and Lek 4 in 1961. From 1953-1980, the average number of males counted on all four leks was 78 males (Figure 4). The high peak count during this same period was 205 males in 1963. Of these 205 males, nearly 50 percent were counted on Lek 1, located within 50 meters west of Highway 395. Annual male attendance on Lek 1 averaged 36 birds from 1957-1970; however, from 1971-1980, that use declined to an average of just 9 males. By 1981, grouse use of Lek 1 had ceased entirely and no birds have been observed on this lek since that time. From 1981-2011, after the disappearance of Lek 1, the average number of males counted within the Fales breeding complex was 27 birds. Lek 4 was last active in 2003 when one strutting male and 3 hens were observed. This lek became permanently inactive in 2006 when a home was built within 50 meters west of the lek. Recent peak male count data from the last decade suggests that although the Fales population is very small compared to historic levels, it has remained relatively stable.

5 females = 1 male
Their Model.
5 X 205 = 1025
Total Southern at Sonora Junction in 1963

Bodie PMU Population Trend. To date, a total of eight dependable long-term leks as well as numerous associated satellite grounds, have been identified in the Bodie PMU. The majority of these leks are located in the Bodie Hills east of Hwy 395;

Then & Now

The Endangered Species Act is broken

by PATRICK K. GOGGINS

Those massive fires last summer and fall certainly have gathered the attention of folks up the line.

It shouldn't have to happen this way.

The former California Superior Court Judge, Craig Manson, who also, by the way, served six years as general counsel for the California Department of Fish and Game and now is assistant Secretary of Interior, told a Los Angeles Times conclave that the "Endangered Species Act" is broken and should no longer be used to give endangered plants and animals priority over human needs. Speaking in Santa Barbara, CA to a group celebrating the 13th Anniversary of the Endangered Species Act, he brought up the point that how could our government, in good conscience, spend $100 million dollars to save species that "nature can't take care of."

That's a good question, Mr. Secretary and one that should have been asked years and years ago.

I have, over the years, flown over the western Montana, Idaho and Washington forests where there has been evidence of massive clear cutting and strip cutting and reseeding projects of trees from 40-50 and 60 years ago. It's unbelievable, when you fly at low altitudes over these areas and notice how many of these trees, that were reseeded, are in a harvestable position and this is a situation that could go on forever just like farming the ground for crops. It's a renewable situation at each and every turn.

If people think it's fine to farm our lands to grow grains and crops and grass and hay, why then wouldn't it be just as important or feasible to "farm" our nation's forests? You know, if we had these timber roads in strategic areas put in, and if we had sheep and cattle grazing on many of these areas, we'd not only be growing a replaceable product called timber but we'd be using this grass to advantage. The sheep and the cattle could also use those roads just as firefighters can use those roads, just as backpackers and tourists could use those roads - they're enjoying it.

I think it's important to let everyone at all levels use these public lands to their advantage, and yes, to the advantage of America.

Yes, Assistant Secretary of Interior Craig Manson is right when he says the Endangered Species Act is "broken" and should no longer be used to give endangered plants and animals priority over human needs. And as Manson said, as discussed above, "Is it in the interest of humanity to spend $100 million dollars a year to save some species that nature can't take care of herself?"

We've seen some things happening already that indicate there is going to be some definite changes in this Endangered Species Act as well as the handling of America's forests.

The massive and devastating fires of late summer and fall that happened in the west and in particular in California has brought the attention of forests and public lands to the front, and it certainly is apparent that the "healthy forests" movement is going to get going full bore.

If you notice the wood products and forest industry have been spending massive amounts of funds and effort in promoting this idea, as they should.

I've noted an almost equally vast of dollars and time and effort being spent by the livestock and agriculture community in order to amend some of these laws that have been discretionary against livestock.

I'm speaking particularly of grazing of sheep and cattle on forest lands to clean up many of these valleys and canyons where undergrowth is prevalent, where grass is abundant. To just simply allow the timber industry to go in and cut wood and thin them, I don't think is totally going to do the job.

Nothing is going to clear so much of those problems as would sheep and cattle.

And remember the sheepmen and cattlemen are going to pay grazing fees to go on to these lands. It isn't like it's going to be a total cost to the government. They will reap good rewards and at the same time help out on fire problems.

96

PATRICIA PEAK KLINTBERG, Farm Journal Washington Editor

To cut taxes or not to cut

USDA analysis shows farmers pay capital gains taxes three times more often than other taxpayers and estate taxes six times more often

Paying for cuts is the kicker

The new found civility between Republicans and Democrats will be sorely tested by the debate about tax cuts and how to pay for them. Both parties acknowledge that estate and capital gains taxes create economic distortions in agriculture.

A USDA analysis shows farmers pay capital gains taxes three times more often than other taxpayers and estate taxes six times more often. Yet the administration proposes capital gains tax relief for home sales only—which is more gesture than substance since strategies already exist to avoid capital gains taxes on homes. Likewise, the proposed estate tax change just gives heirs extra time to pay off Uncle Sam.

However, there is increasing interest in a solution that both parties may embrace: indexing the estate tax exemption and capital gains taxes for inflation.

Consider that the $600,000 estate tax exemption, effective since 1987, would be $1 million today if it had been indexed. Look at what happens to the capital gains tax on an acre of land purchased in 1966 for $158 and sold in 1996 for $890: if indexed, the tax is $47/acre, if not, it's $205/acre, says USDA Chief Economist Keith Collins.

Indexing won't fly unless Congress can pay for it. Since discretionary federal spending amounts to about one-third of the total budget, it will be tough to scrape up enough to offset tax cuts. That's why there is talk of "correcting" the Consumer Price Index (CPI), thought to overstate inflation by 1.1%. Used to set cost-of-living increases, a mere 1% cut in the CPI saves $141 billion over five years.

Civil rights gripes breed more bureaucracy

It is hard to believe that a farmer seeking information about programs could be denied timely help at the county level. For farmers to whom this has happened, it is even harder to prove.

After listening to minority and low-income producers, Agriculture Secretary Dan Glickman is convinced "the structure by which we implement agricultural programs is not accountable." Yet his solution to federalize Farm Service Agency (FSA) employees so they are no longer accountable to farmer-elected county committees promises more bureaucracy, not more accountability.

He would appoint two members of each county committee to reflect racial and sexual diversity, and create civil rights complaint offices in every agency.

Meantime, USDA's own inspector general found the present civil rights office far from a model. It had 241 complaints backlogged. Of the 151 cases dealing with credit, 73 complain of being denied loans due to discrimination. Yet producers were dealing with then-federal Farmer's Home Administration employees.

Property rights victory

In a major victory for property rights advocates, the U.S. Supreme Court handed down a unanimous decision that landowners have the right to contest enforcement of the Environmental Species Act (ESA) if it causes adverse economic impact.

The case involved a group of Oregon farmers and ranchers who sued the U.S. Fish and Wildlife Service after the agency diverted irrigation water to maintain minimum water levels for two species of fish, causing the farmers and ranchers to sustain crop and livestock losses. The Ninth Circuit Court of Appeals ruled against the landowners.

In the Supreme Court decision, Judge Antonin Scalia writes: "The obvious purpose of the requirement that each agency 'use the best scientific and commercial data available' is to ensure that the ESA not be implemented haphazardly on the basis of speculation or surmise. While this no doubt serves to advance the ESA's overall goal of species preservation, we think it readily apparent that another objective...is to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursing their environmental objectives."

Limited CRP extension?

Rep. Jerry Moran (R., Kan.) proposed legislation to allow current Conservation Reserve Program (CRP) contractors who bid and are denied entry into the new CRP a one-year extension. He reasons that if producers don't know if they are in or out until June, preparing grass for wheat planting in September will be difficult.

USDA acknowledges the problem but may support an extension shorter than one year for winter crops only. The new lower rental rates would apply. *FJ*

No [redacted] - 3 Pages.

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EXHIBIT #2–3 Pages

Have you been falsely charged with a crime?

US~Observer

February 2007

Demanding Accountability

Nevada News & Commentary

Predators - Mule Deer & Desert Sheep Populations

By James "Mike" Laughlin

Nevada - In 1867, D.C. Wheeler trailed a band of domestic sheep from Oregon to western Nevada. Since that time, there has been some type of predator control conducted in and around sheep herds in Nevada. In 1927, there were reported to be 1,200,000 sheep and 400,000 beef cattle in the state. Each stockman or groups of stockmen fought their own predator problems. After World War One, the federal government took over the predator program. Under the Biological Survey, professional hunters were hired to pursue coyotes, bobcats, and mountain lions state wide. In 1939, 93,000 coyotes were reported killed throughout the state of Nevada. Counties also paid bounties on coyotes and lions. The longhair fur industry became profitable and private fur trappers harvested many coyotes and bobcats.

In 1946, the federal government began to use sodium monofluoroacetate, a toxicant-called 1080. This poison was tasteless, odorless, and colorless and highly selective to canines. It proved to be the single most effective tool ever used to suppress coyote numbers. 1080 was injected into sheep or horsemeat. These baits were placed in coyote runways. Also, about this time, the cyanide getter was used to a real advantage taking large numbers of coyotes. Steel traps and head snares were also used. Deer numbers were very high statewide and deer tags could be purchased over the counter. There were also lots of upland game birds.

In 1962, Rachel Carson published the book "Silent Spring" which brought worldwide attention to the use of pesticides. Starting from the publication of this book, the environmental movement was launched throughout the world.

In 1972, President Nixon banned the use of all toxicants (poisons) by executive order. He was soliciting the support of environmentally concerned voters. With the loss of toxicants in the Animal Damage Control program, coyote numbers began to increase dramatically. Coyote predation upon newborn range calves became a

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real problem in many areas of Nevada. Cattlemen, along with sheep men, backed the predator control efforts in the state.

The federal government launched into a non-toxic predator program. A large amount of federal money was appropriated and spent in an attempt to prove that the use of non-toxic control tools could replace 1080, cyanide getters, etc. The use of helicopters to shoot coyotes from the air was initiated in Elko, Nevada. About this same time, use of fixed-wing aircraft, which had been used before to hunt coyotes, was also increased. Longhaired fur prices went sky high and fur trappers were out in force after coyotes & bobcats. The Animal Damage Program also employed 3 to 4 mountain lion hunters with dogs, who pursued mountain lions statewide, year around. Most of the mountain lion depredation calls occurred on or near domestic sheep ranges. With the removal of many coyotes and mountain lions by the Animal Damage Control program and private fur trappers, mule deer numbers began to rise dramatically.

In the late 1970s, the predator control program shifted from Department of Interior to the Department of Agriculture. Federal funding began to dry up. The BLM and U.S Forest Service began to clamp down on predator control activities on lands they administered. Law suites by environmental groups filed against grazing allotments and Federal and State agencies were initiated throughout Nevada. The Nevada Department of Fish & Game became concerned about the environmental community and about lion numbers and implemented a quota system by hunting units.

Domestic range sheep numbers, in the late 70s, began a decline statewide and therefore predator control activities declined. Consequently, mule deer population numbers began to go down.

I feel that, through all of this, the Nevada Department of Wildlife, for about $30,000 a year, got virtually a free ride in the predator program administrated by the U.S. Fish and Wildlife Service and their cooperators. Since this time when domestic sheep numbers fell and predator control activities diminished, mule deer numbers have steadily decreased.

The Nevada Department of Wildlife has attributed the decline of deer herds with such factors as over-grazing by livestock, drought, over-winter mortality, fire, longhair fur prices, gas prices going up, etc. Never once did I ever hear a statement by a Nevada Department of Wildlife biologist to the fact that predators may have made a big impact upon Mule deer and Desert Sheep populations.

It is my prediction that mule deer and desert bighorn sheep numbers may never come back to the levels of the

"good old days" because predators have a free roll in Nevada today. The Nevada Department of Wildlife continues to be "in denial" concerning the impact of predation on Nevada Mule Deer and Desert Sheep populations throughout the state.

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On the 50th Anniversary of the

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JUNE 28, 1934 JUNE 28, 1984

Exhibit #4

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Common raven occurrence in relation to energy transmission line corridors transiting human-altered sagebrush steppe

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ABSTRACT

Energy-related infrastructure and other human enterprises within sagebrush steppe of the American West often results in changes that promote common raven (*Corvus corax*; hereafter, raven) populations. Ravens, a generalist predator capable of behavioral innovation, present a threat to many species of conservation concern. We evaluate the effects of detailed features of an altered landscape on the probability of raven occurrence using extensive raven survey (n = 1045) and mapping data from southern Idaho, USA. We found nonlinear relationships between raven occurrence and distances to transmission lines, roads, and facilities. Most importantly, raven occurrence was greater with presence of transmission lines up to 2.2 km from the corridor. We further explain variation in raven occurrence along anthropogenic features based on the amount of non-native vegetation and cover type edge, such that ravens select fragmented sagebrush stands with patchy, exotic vegetative introgression. Raven occurrence also increased with greater length of edge formed by the contact of big sagebrush (*Artemisia tridentata* spp.) with non-native vegetation cover types. In consideration of increasing alteration of sagebrush steppe, these findings will be useful for planning energy transmission corridor placement and other management activities where conservation of sagebrush obligate species is a priority.

1. Introduction

Common raven (*Corvus corax*; hereafter, raven) numbers have been increasing every year in semiarid environments across most of the western United States for the past several decades (Sauer et al., 2011). In Idaho, statewide raven abundance has increased five-fold since the 1960s (Sauer et al., 2011) and from 1985 to 2009 raven abundance has increased 11-fold within a remote energy research complex that occupies semiarid sagebrush steppe in southeastern Idaho, known as Idaho National Laboratory (INL; Gonzales-Stoller Surveillance, LLC, Idaho Falls, Idaho; ESER Breeding Bird Survey, unpublished data).

As a generalist species with a great capacity for behavioral modification, ravens take advantage of newly available resources placed in the environment as a result of human enterprises. Human alteration of semiarid landscapes often provides unintended food and water resources beneficial to raven survival and reproduction (Boarman and Heinrich, 1999; Boarman et al., 2006; Kristan and Boarman, 2003), an outcome referred to as an "anthropogenic subsidy" effect. In addition, tall structures such as energy transmission towers provide ravens with elevated perches from which to hunt and also serve as nesting substrate where natural tall nesting substrates like trees are rare or nonexistent (Howe et al., 2014; Knight and Kawashima, 1993; Steenhof et al., 1993). These unintended subsidies to ravens are thought to increase raven population size, density, and range by promoting raven survival and reproduction (Kristan et al., 2004; Webb et al., 2004).

Increased presence of ravens can be deleterious to other species, causing conservation problems. For example, ravens prey on the eggs and young of endangered desert tortoise (*Gopherus agassizii*; Boarman, 1993), California condor (*Gymnogyps californianus*; Snyder and Snyder, 1989), California least tern (*Sterna antillarum browni*; Avery et al., 1995), Western Snowy Plover (*Charadrius nivosus*; Burrell and Colwell, 2012), and Marbled Murrelet (*Brachyramphus marmoratus*; Peery et al., 2004). Raven abundance is positively correlated with depredation of eggs and nestlings of birds (Andrén, 1992; Luginbuhl et al., 2001), including greater sage-

Abbreviations: AIC, Akaike's Information Criterion; CI, Confidence interval; DOE, Department of Energy; ER, Evidence ratio; GLMM, Generalized linear mixed model; INL, Idaho National Laboratory; Km, kilometer; RSPF, Resource selection probability function.

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grouse (*Centrocercus urophasianus*; hereafter, sage-grouse; Coates et al., 2008; Coates and Delehanty, 2010; Lockyer et al., 2013). Furthermore, recent evidence suggests that sage-grouse incubation behavior is influenced by presence of ravens (Coates and Delehanty, 2008) and sage-grouse avoid avian predators when selecting nesting and brood rearing locations (Dinkins et al., 2012). Increased raven abundance may limit available high-quality nesting and brood-rearing habitat for sage-grouse.

To better understand these processes and to increase our ability to anticipate the degree to which future habitat alterations in the semiarid American West will subsidize further raven expansion, careful analysis of current raven occurrence within altered landscapes is necessary. A recent investigation of nest site selection by ravens on the INL (Howe et al., 2014) found ravens selected nest sites in close proximity to transmission lines and areas with increased land cover edge and multiple edge types associated with human disturbance, wildfire, and the introduction of non-native plant species. While resource selection by territorial breeding ravens is centered on nest site location (Howe et al., 2014), non-breeding migrants and juvenile dispersers often congregate at food and water sources and exhibit nomadic movements to follow food supplies (Heinrich et al., 1994). As such, raven occurrence can differ spatially and temporally based on life-history stage. Especially useful would be to assess the probability of occurrence for ravens across different life-history stages (breeding and non-breeding) relative to specific human alterations of sagebrush steppe and how the effects of subsidies vary under different landscape conditions. These findings can then be compared to those of only breeding ravens (Howe et al., 2014) to help further our understanding of factors that influence raven resource selection.

An important future alteration is the anticipated development of a national energy transmission grid intersecting continuous sagebrush steppe of the western United States and the placement of transmission towers integral to this grid. Such a network of transmission towers and power lines has the potential to promote further expansion of raven populations in those areas leading to further conservation conflicts with numerous prey species including sage-grouse. Our primary objective was to conduct a multi-scale, comprehensive analysis that identified associations between vegetation communities, anthropogenic features, and raven occurrence within an altered sagebrush steppe ecosystem. Specifically, we modeled resource selection probability functions for ravens using a combination of covariates that included land cover types at multiple spatial scales, edge (interface between two land cover types) indices, energy infrastructure, and other anthropogenic subsidies. Our secondary objective was to use the predictive indicators to develop spatially-explicit maps that depicted variation in the probability of raven occurrence across the study landscape, as well as uncertainty of the predicted value. Findings from this analysis provide land managers with information with which to assess environmental impacts for proposed land use changes associated with energy transmission corridors.

2. Materials and methods

2.1. Study site

The study area was within the INL, located along the Snake River Plain of southeastern Idaho, USA (Fig. 1A), and encompassing approximately 231,500 ha of cold desert sagebrush steppe. The study area and neighboring lands, topography, climate, and vegetation communities have been described in detail elsewhere (Howe et al., 2014; Shive et al., 2011). Briefly, the study area consisted of areas with differing degrees of anthropogenic alterations including the development of nuclear research facilities, 230 km of paved roads and 297 km of electrical transmission and distribution lines (Fig. 1B) that lie within otherwise relatively intact sagebrush steppe. On our study site, transmission line poles were wooden post structures ranging in height from 15.2 to 21.3 m with double wooden cross arms ranging in height from 11.9 to 17.4 m. Distribution line poles consisted of wooden post structures ranging in height from 15.2 to 16.8 m. For the purpose of this study we refer to both types of energy lines as transmission lines.

Human activities and numerous wildfires have influenced the composition of portions of the vegetation communities within the study area. Some post-fire communities were characterized by resprouting native shrubs, perennial grasses and forbs, while other disturbed areas were colonized by invasive species, such as cheatgrass (*Bromus tectorum*), desert alyssum (*Alyssum desertorum*), and crested wheatgrass (*Agropyron cristatum*). Together,

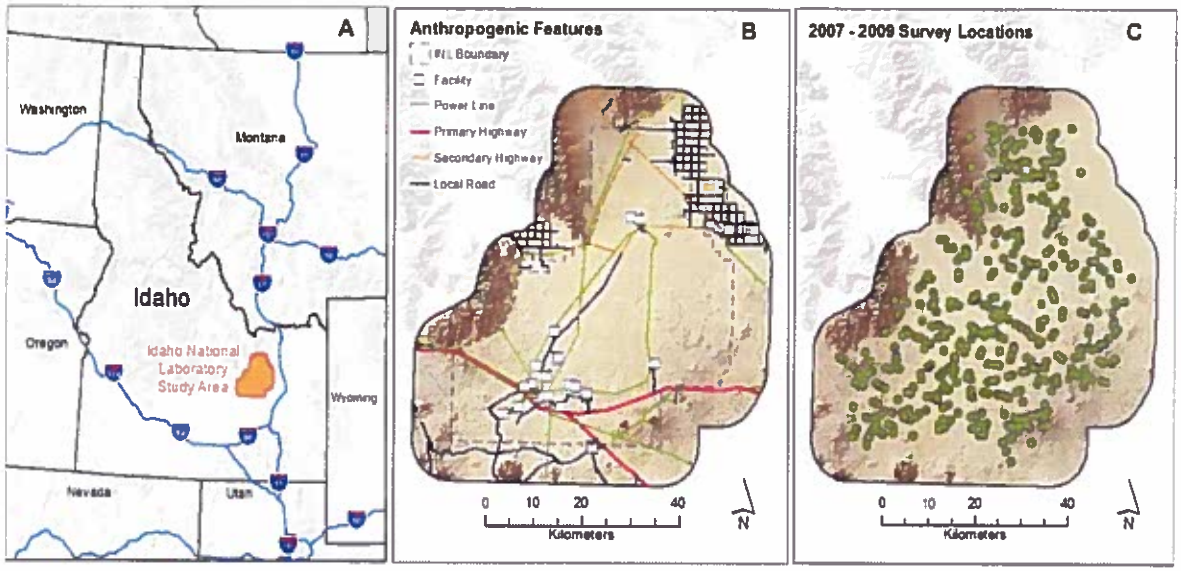

Fig. 1. Study area (A), anthropogenic factors (B), and raven surveys (C) used as covariates in common raven resource selection analysis. Data were collected within and near Idaho National Laboratory in southeastern Idaho during 2007 – 2009.