IN DEFENSE OF ANIMALS

April 3, 2005

Mr. Don Neubacher
Superintendent
Point Reyes National Seashore
Point Reyes Station, CA 94956

Via Fax (415/663-8132) and Email: ann_nelson@nps.gov
16 Pages

Dear Mr. Neubacher:

Please accept this letter as comments on the Non-native Deer Management Plan Draft Environmental Impact Statement (DEIS) submitted on behalf of In Defense of Animals.

We are disappointed in this document because we believe it is not an objective assessment of the situation with the non-native deer at the park, nor is it an adequate evaluation of the non-lethal alternatives available to the park for controlling the exotic deer populations.

In reading the DEIS document, we are struck by the lack of scientific documentation indicating that the deer are negatively impacting the natural resources of the Pt. Reyes National Seashore (PRNS). We are also struck by the lack of hard data to support the Berkeley computerized population projections. We recall how far off these projections were regarding the carrying capacity of the tule elk range in the early 1990's.

While we recognize your legitimate concerns about the deer colonizing outside the park, it is also clear that the deer are not having significant negative impacts on the park environment at present. As a result, the park has the luxury of time to undertake non-lethal fertility control programs that could impact population growth of both species over the long run.

We believe that the DEIS is woefully inadequate in its exclusion of a strictly non-lethal, alternative for managing the deer population. The section describing the feasibility of immunocontraception and immuno-sterilization is also woefully inadequate and appears to have been written by biologists philosophically opposed to wildlife contraception.

We believe that no discussion of non-native deer extirpation through lethal means can occur while cattle graze nearly 20,0000 acres. These cattle are far more destructive to the park's natural resources than the non-native deer could ever be. The park should conduct an Environmental Impact Statement (EIS), in accordance with NEPA, thoroughly addressing the significant environmental impacts of agricultural lease renewals on the PRNS before completion of the non-native deer management plan. NEPA requires that the cumulative

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process for only non-native species, you have looked at only one side of the equation. More is required under NEPA before lethal extirpation of the non-native deer could be legally or ethically justified.

Clearly public opinion favors non-lethal, humane management of these deer species. The DEIS should be re-written to include a preferred alternative of non-lethal management methodologies and the PRNS should rely on actual experts in the field of wildlife fertility control in its assessment of this alternative.

More detailed comments are attached to this letter.

Sincerely,

Suzanne Roy
Program Director
In Defense of Animals
919/732-8978
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Attachment: Specific comments on DEIS
U.S. District Court, District of Columbia Civil No. 98CV2355 (RMU)
Abstract: Zoo Biology, Vol. 22, Issue 3, Pages 261-268

IN DEFENSE OF ANIMALS

April 4, 2005

Mr. Don Neubacher
Superintendent
Point Reyes National Seashore
Point Reyes Station, CA 94956

Via Fax (415/663-8132) and Email: ann_nelson@nps.gov

1 Page: Addendum to IDA's Comments on the PRNS Non-native Deer Management Plan Draft Environmental Impact Statement (DEIS)

Dear Mr. Neubacher:

I have just been in touch with Dr. Jay Kirkpatrick. He reports not only does pZP work fine in fallow deer (as stated in the Zoo Biology article included with my comments), but also that the antibody titers remain very high for a long period of time. This means that after the first two or three years of treatment, the deer do not have to be treated annually. His current estimate is that they would have to be treated once every four to five years after that. He reports that this is different from white-tail deer and seems to be species-specific in fallow deer.

The omission of the latest published research on immunocontraception in fallow deer, and the failure of the DEIS author to contact Dr. Jay Kirkpatrick, the leader in the field of immunocontraception is a major shortcoming of this document. It is disappointing that your staff did not prepare a more objective assessment of this cutting-edge wildlife management technology.

Sincerely,

Suzanne Roy
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IDA COMMENTS ON PRNS NON-NATIVE DEER MANAGEMENT PLAN DRAFT ENVIRONMENT IMPACT STATEMENT
April 3, 2005

I. Overview

The 2001 NPS policy regarding non-native species "specifically requires managers to manage all non-native species not maintained for an identified park purpose, up to, and including eradication, if control is prudent and feasible and the species "interferes with natural processes and perpetuation of natural features, native species or natural habitats."

In its preferred alternative, PRNS seeks to eradicate the non-native deer primarily through lethal culling activities, supplemented by small-scale immunosterlization trials. Through the DEIS, however, the park has failed to demonstrate that this extermination of the axis and fallow deer from PRNS is justified.

The DEIS lacks evidence that the non-native deer species are interfering with the natural resources of the park in any significant way. Further, the DEIS failed to adequately explore the impacts of culling on the natural resources of the park, a factor that could render massive sharpshooting and extirpation of the deer imprudent. Finally the DEIS failed to realistically assess the ability of culling to eradicate non-native deer from the park, a factor that would make the PRNS preferred alternative infeasible and not in accord with the 2001 NPS directive.

II. There is no scientific documentation to indicate that the axis and fallow deer are negatively impacting native species in the park.

The NPS has clearly failed to ensure the scientific integrity of the DEIS's analysis of the impacts of culling non-native deer on the Park's resources, as is required by the Council on Environmental Quality (CEQ) regulations. See 40 C.F.R. § 1502.24. This is demonstrated clearly in the summary statement:

> "Some of the more serious effects these non-native deer have at the seashore include possible competition with, and displacement of native tule elk and black-tailed deer... the *potential* for transmitting disease to these native ungulates, and heavy use of and resulting impacts to riparian habitat and *presumably* to the native wildlife dependent on these habitats." (p. 24, Emphasis added)

A. Many of the impacts cited are either minor or speculative:

> "Current impacts to water quality and resources from non-native deer in the park are minor. . ."
>
> "Soils *could* be affected by non-native deer in several ways. . ."

IDA COMMENTS ON PRNS NON-NATIVE DEER MANAGEMENT PLAN DRAFT ENVIRONMENT IMPACT STATEMENT
April 3, 2005

> "Deer, and other ungulates, *can cause* a variety of impacts on vegetation"
>
> "Damage to riparian and understory vegetation within the seashore is currently considered minor in intensity."
>
> "Non-native deer, *can* affect native wildlife . . ."
>
> "To date, no direct effects have been noted on the productivity or survival of [spotted] owls."
>
> "Western snowy plovers nest along the sandy beaches of the Seashore that *may* also be used sporadically by axis deer."
>
> "Fallow deer regularly frequent riparian areas where California red-legged frog live and/or breed. They *can* destroy vegetation by trampling or eating plants, and by thrashing their antlers during the rut. Overall the adverse impacts . . .. would be minor and long term."
>
> "To date it is not known whether the non-native deer browse on the preferred nectar or larval host plants of the [Myrtle's silverspot] butterfly. However, research elsewhere suggests that they *may* graze on species similar to the one plant that serves as a larval host for Myrtle's silverspot butterfly at PRNS."

B. Future impacts are based on questionable computer models of population growth curves.

These computer models have been demonstrated to be faulty before, as in the case of wrong estimates of the carrying capacity of the tule elk range, which have been revised upwards by hundreds of animals since the original modeling projections – made by the same U.C. Berkeley scientists – were generated in the early 1990's.

The computer models are not based on real field data. Data that PRNS lacks include:

- Studies that look at the reproductive rate for fallow, axis, black tailed deer and tule elk as impacted by amount and distribution over a year of rainfall. This actual data could be collected through fecal samples and weather records.
- Evaluation of whether vegetation in areas where fallow deer live is different in biomass and/or species varieties than in areas where they do not live;
- Examination of the degree of overlap in the diet between the fallow, axis, and black-tailed deer and tule elk.

IDA COMMENTS ON PRNS NON-NATIVE DEER MANAGEMENT PLAN DRAFT ENVIRONMENT IMPACT STATEMENT
April 3, 2005

This real data could be generated by scientists doing work in the field as opposed to those sitting behind their desks working on computer models that have been proved wrong in the past.

One actual study is apparently underway. Page 123 of the DEIS states that an analysis of ungulate fecal pellets by Humboldt State University has been ongoing since 2000. The DEIS states that this study should be able to identify any overlap between the tule elk diet and the fallow deer diet in the Limantour area of the PRNS. However, the data is not yet in, and the assumptions in the DEIS about fallow deer impact on vegetation and native tule elk species are premature.

C. The DEIS relies on anecdotal information to suggest a negative impact of the non-native deer on native species.

- For example, the DEIS mentions unpublished data of fallow bucks observed sparring with tule elk bulls and chasing them off. No information is given on the number of bulls involved or of the frequency with which this behavior has been observed. IDA is aware that one male fallow buck was seen challenging tule elk males around the time of the rut. This was considered to be an odd an exceptional animal – who has been seen trying to herd female elk around but not being very successful at it.

D. The DEIS makes speculations that do not seem to be grounded in reality.

The DEIS states:

> "resource managers are concerned that [the tule elk] *may* be kept from fully occupying habitat in PRNS [at the Limantour site] by competition from fallow and/or axis deer."

With 38 elk on 22,0000 square acres at that site, this speculation stretches the limit of credibility.

E. The DEIS relies on studies of questionable relevance to the situation at PRNS.

The relevance of studies in New Zealand of high-density populations of fallow deer out-competing native red deer is questionable. Too few variables are described to know whether extrapolation from that situation to the PRNS situation

III. There can be no justification for extirpation of non-native deer through lethal means while non-native, environmentally destructive, cattle continue to graze tk acres of the PRNS.

A. Cattle have far greater environmental impacts on the park than do non-native species.

IDA COMMENTS ON PRNS NON-NATIVE DEER MANAGEMENT PLAN DRAFT ENVIRONMENT IMPACT STATEMENT
April 3, 2005

PRNS cites a Biological Assessment, conducted under the Endangered Species Act, to analyze the effect of agricultural lease renewals on special status species in the park. PRNS reaches the illogical conclusion that ranching with 6,350 non-native cattle on 18,900 acres of the national seashore is not likely to jeopardize these species, while it uses speculation, anecdote and supposition to conclude that the 860 fallow deer and the 250 axis deer in the park will negatively impact these species.

PRNS should undertake an objective assessment, in accordance with NEPA, of the environmental impacts of ranching lease renewals in the park. The final EIS on the management plan for the non-native deer should include an alternative that considers eliminating ranching and dairy operations from the park. Such a plan would create thousands of acres more habitat for native species and would change the equation with regard to concerns about non-native deer.

NEPA requires that "connected actions, which means they are closely related" should be "discussed in the same document. (CEQ Regulation 1502) The DEIS considers only one side of the equation – the impacts of non-native deer – without considering the impacts of cattle and their interrelatedness with overall impacts to the PRNS ecosystem.

The DEIS also discusses the impacts of the non-native deer on ranching operations. In doing so, it exaggerates these impacts – in reality only 4 of 26 ranches reported problems of minor intensity. IDA does not believe that the objective of the park to eliminate the non-native deer to lessen impacts on ranching within the PRNS is legitimate or legally justified.

The DEIS discusses the potential that non-native deer carry paratuberculosis, but does not state that the deer got the disease from the cattle in the first place. Paratuberculosis is endemic to the West Marin region, due to the predominance of ranching activities there. The DEIS states the prevalence of paratuberculosis was about 10% and 8% in axis and fallow deer, respectively, but does not state the prevalence of the disease in cattle in the region.

Again, this is an issue that has been distorted in the DEIS – suggesting that the non-native deer are vectors for this disease without reporting that the disease, is in fact, endemic to cattle and dairy ranching in West Marin. It is the cattle that are the real reservoir of this disease and pose the most risk to native wildlife.

In addition, the chances that paratuberculosis will become more of a problem will be increased by culling, as a stressed population is more susceptible to this disease. Culling could increase chances of disease transmission to cattle and native wildlife. This impact should have been explored in the DEIS.

IDA COMMENTS ON PRNS NON-NATIVE DEER MANAGEMENT PLAN DRAFT ENVIRONMENT IMPACT STATEMENT
April 3, 2005

III. The DEIS failed to include an alternative that involved a strictly non-lethal fertility control program for management of the deer.

A. The DEIS did not objectively evaluate the potential of immuno-contraception and immuno-sterilization for control of the non-native deer species.

NEPA requires that an environmental impact statement should "rigorously explore and objectively evaluate all reasonable alternatives . . . " (CEQ Regulation 1502).

The PRNS officials dismissed the feasibly of non-lethal population management without out consulting leaders in the field of wildlife contraception for their assessment.

The DEIS appears to have been prepared by biologists who are philosophically opposed to wildlife fertility control

- Park biologists met with community groups as long as 2 years ago and stated that contraception was not feasible. This conclusion was reached before any environmental analysis was prepared.

- Park biologists used unscientific statements to support their contention about the infeasibility of fertility control. One example is the claim that immunocontraceptives could get into the food chain if a deer is preyed upon by a mountain lion or hunted by people and used for meat. This is untrue. According to Dr. Jay Kirkpatrick, the pioneer of the immunocontraceptive porcine Zona Pellucida (pZP), "The vaccine is a non-microbial protein molecule, which can't go through the food chain even if you wanted it to." Dr. Kirkpatrick states if that was possible scientists wouldn't have to go out and dart the animals, they could just feed them the contraceptive drug. (email communication 3/14/2005)

B. The DEIS selectively quotes the scientific literature to make a case against the use of fertility control in non-native deer.

The DEIS states:

> " No published reports exist of pZP's effectiveness in preventing fallow deer from reproducing; however Kirkpatrick concludes from unpublished data that a yearly pZP vaccine would be "ineffective in fallow deer" (Kirkpatrick, et. all 1996a and b)." (Pg. 42, Emphasis added.)

The DEIS ignores recent published data indicating that fawn production was "reduced significantly" in two herds of semi-free ranging fallow deer inoculated

with pZP. ("Immunocontraception of captive exotic species: Contraception and population management of fallow deer," Zoo Biology, Vol 22, Issue 3, p. 261-268, June 2003. (See attached abstract.)

C. The DEIS, without foundation, rejects out of hand the use of SpayVac, a longer-acting immunocontraceptive on axis deer.

It states:

> "No long-acting contraceptive currently exists for axis deer. . . .annual contraception is ineffective in reducing the population of axis deer to 350." (p. 44)

Yet on Page 42, the DEIS states,

> "Immunocontraception with the porcine Zona Pellucida (pZP) vaccine has also been shown to prevent conception for 1 year in a variety of deer species, including axis deer. (Kirkpatrick, et. al. 1996) "

The DEIS fails to state that SpayVac, the immunocontraceptive/sterliant the park proposes to pilot is just a longer-acting version of the pZP vaccine.

D. The latest information about immunocontraception in fallow deer is not included in the DEIS.

No mention is made of the pilot study currently underway on private land in South Carolina with SpayVac on fallow deer. In that project, a South Carolina marsh of 3 square miles and 600 deer, 87 deer were caught, tagged and immunized in a one-month period. (Allen Ruttberg, Tufts University, telephone conversation, 3-22-05)

D. The DEIS states that a fertility control program large enough to manage the non-native deer without lethal control is too labor and cost intensive without considering the volunteer expert assistance and private funding that would be available to PRNS for a progressive, non-lethal fertility control program.

As one example of private funding availability, the Bosack Kruger Foundation awarded PRNS a $40,000 grant to underwrite the tule elk immunocontraception project in the mid- 1990's. In addition, public support for a non-lethal program is strong; contributions from the public to underwrite such a program could be made to the Pt. Reyes National Seashore Association. This aspect of resource availability for the park was completely overlooked in the DEIS.

E. DEIS rejects out of hand the feasibility of fertility control programs, again basing its conclusion on unverified, theoretical computer models and as cited above, selective citing of the scientific literature. This conclusion is reached before the results of the pilot study of SpayVac on fallow deer (Exotic Deer Immunosterilant, PORE *PMIS Number 67856*) are known.

IDA COMMENTS ON PRNS NON-NATIVE DEER MANAGEMENT PLAN DRAFT ENVIRONMENT IMPACT STATEMENT
April 3, 2005

IV. The DEIS does not adequately explore the effectiveness or the impacts of culling on the park.

A. The DEIS overestimates the ability of park sharpshooters to exterminate the non-native deer from the park.

The DEIS does mention that once shooting begins, deer may move to various inholdings of private land in and around the park. One of these, the Vendanta property, has stated unequivocally that they will not allow park sharpshooters to kill any deer on their property. This means that there will be a refuge for the non-native deer in Olema Valley, making their total elimination highly unlikely.

B. The DEIS failed to explore the likelihood that culling will actually increase the incidence of non-native deer leaving the park.

Sharpshooting activities will create pressure on the non-native deer population to leave park boundaries for private inholdings or areas beyond park boundaries where hunting is rare. The low incidence of hunting in Marin County means that it will be safer for non-native deer outside the park then inside the park. This action could actually create an effect opposite to PRNS's goal of decreasing the number of deer leaving park boundaries.

C. The DEIS failed to examine the impact of culling on paratuberculosis infection of the non-native deer herds.

Published research shows that paratuberculosis affects young, old and weakened animals. A stressed population will be more vulnerable to paratuberculosis. If the incidence of paratuberculosis in the non-native deer populations increases, and the non-native deer leave the park in increasing numbers, then spread of paratuberculosis could become a real issue. Currently, only a small percentage of deer carry the disease and few seem to be affected by it.

D. The DEIS failed to adequately assess the impact of culling on other wildlife species in the park.

- The DEIS did not adequately examine the impacts of culling activities on native deer. These include: increased human intrusion into deer habitat, noise, stress from shooting, and increased predation due to decrease in non-native deer population.
-

IDA COMMENTS ON PRNS NON-NATIVE DEER MANAGEMENT PLAN DRAFT ENVIRONMENT IMPACT STATEMENT
April 3, 2005

- The DEIS did not adequately assess the impact of culling activities on endangered and threatened species, such as the spotted owl, in the park, including any site-specific discussion of where sharpshooting is expected to take place, and what ESA-listed species may be affected. These include: increased human intrusion into habitat, including wilderness areas, noise, stress from shooting and possible conflicts with Fish and Wildlife Service Species Recovery Plans.

- The DEIS presents insufficient details on culling activities, such as numbers of sharpshooters, duration of shooting, specific vehicular intrusions on habitat, etc. for the public to make an informed decision about the impacts of culling activities on wildlife in the park.

- The DEIS does not address the fact that culling activities and the resultant increased human intrusion onto habitat are counter to the goals of minimizing human impact on wilderness areas and habitat for special status species.

- The PRNS does not appear to have undertaken a Section 7 consultation with Fish and Wildlife Service with regard to the impact of culling/extirpation activities on protected species, as required under the Endangered Species Act. Particularly with respect to the ESA-listed bird species in the Park, including the Northern spotted owl and the plover, acoustical disturbances from sharpshooting will undoubtedly have an effect on any species that are in the vicinity. Although the EIS failed to identify, much less discuss in any meaningful detail, the impacts that culling in the Park may have on these species, and has nowhere explained exactly where sharpshooting is to occur, all of the impacts discussed above warrant further analysis by the NPS and the FWS through ESA section 7 consultation. Indeed, without such analysis, there is certainly a risk that sharpshooting in the project area could result in a prohibited "take" of these species under ESA section 9, by either "harm[ing]" or "harass[ing]" them within the meaning of the ESA. See 16 U.S.C. § 1538(a)(1)(B); 50 C.F.R. § 17.3.