

**SUMMARY OF STAFF PROPOSED REVISION OF
OREGON ADMINISTRATIVE RULE 635 DIVISION 049
PRIVATE HOLDING OR PROPAGATING OF CERVID SPECIES**

Staff is proposing a comprehensive revision of the Oregon Administrative Rules governing the Private Holding and Propagation of Cervid Species (OAR 635-049 or Division 049), plus related housekeeping changes to Divisions 045 and 200. Full texts of these revisions are included in Attachment 4.

Our proposal to revise Division 049 has three objectives:

- To implement Oregon's Wildlife Policy (ORS 496.012) and the statute governing private propagation of cervids (ORS 497.228);
- To provide those privately holding cervids with certainty regarding what is expected of them; and;
- To clarify Division 049 so it can be effectively implemented and enforced.

Regulation of the private holding and propagation of cervids is a complicated issue with diverse public perspectives. Our proposal to revise Division 049 attempts to accomplish these objectives while balancing the associated public perspectives.

Below is a brief background discussion followed by what staff believe are the primary policy issues to be considered in revising Division 049. Tables referenced are included at the end of this Attachment.

Please note two ways in which the staff proposal has evolved since Notice of Proposed Rulemaking was issued for this matter March 1 in the Oregon Bulletin. First, the proposed rule package did not propose requiring a bond or business insurance of licensees. We now believe that some kind of financial security should be required, and have developed an approach we believe is reasonable. This is discussed more fully in the staff summary concerning OAR 635-049-0175.

Second, staff did not intend to propose changing current rule requirements allowing the use of wooden fence posts. The rule package sent out for public comment did not make this clear.

Should the Fish and Wildlife Commission (Commission) agree with the staff's proposed approach to each of these two issues, we would draft language accordingly.

BACKGROUND

In late 2006 and early 2007 the MAD Elk Coalition and Oregon Elk Breeders Association (OEBA) petitioned the Commission to revise regulations in Division 049. Revisions

proposed by these petitioners ranged from changes intended to eliminate private holding and propagation of elk in Oregon to changes intended to ensure the long-term health and survivability of captive and wild elk.

The Commission denied these petitions and created the Cervid Rule Advisory Group (CRAG) to recommend ways to improve Division 049. The CRAG was composed of a broad cross-section of parties interested in Oregon elk farming. They met five times during 2007 and made over 100 recommendations to revise Division 049 (CRAG 2007). While there was general agreement among CRAG members that Division 049 could be improved, there was little agreement on the specifics. Materials developed in the course of the CRAG's deliberations as well as their recommendations are included in Attachment 5.

Staff used the CRAG's recommendations to develop a Preliminary Concept for revision of Division 049 to focus public discussion on the types of rule changes that might be proposed. The Preliminary Concept was issued for public comment after presentation to the Commission in December 2007.

Over 200 public comments were received on the Preliminary Concept through early February 2008 (Attachment 6). Comments ranged from concern that the changes suggested were unnecessary because elk farms have not affected Oregon wildlife in over 30 years of operation, to concern that private holding of elk poses an unacceptable risk to Oregon's wildlife and cervid farming should cease. Some felt regulating cervids was a property rights issue and the Commission should not infringe on these rights. Others felt the Commission should assume more responsibility in regulating cervids by assuming responsibilities currently handled by another agency.

Staff used public comments to develop a formal proposal to amend Division 49, along with related housekeeping changes to Divisions 045 and 200. As noted above notice of proposed rulemaking was made March 1. The public comment period on the proposed rule package will extend into the Commission's April 18 meeting, at which time a public hearing will be held.

Staff recognizes that public comments will continue to arrive from the date preparation of this staff report (mid-March) until the April 18 meeting. The Commission will receive copies of all public comments received by April 18. Staff will do its best to analyze for the Commission any new issues raised by comments received after the date of this staff report.

Division 049 requires that persons wanting to privately hold and propagate cervids must obtain a license and comply with certain operational standards as required by ORS 497.228. It begins with rules that apply to all licensees, followed by rules applying to those holding cervids other than fallow deer and reindeer (Type 1), and ends with rules that specifically apply to those holding fallow deer and reindeer (Type 2). Table 1 and Table 2 provide a list of current Type 1 and Type 2 license holders respectively.

Staff is proposing to mainly revise rules governing Type 1 cervids because elk were the focus of the MAD-Elk and OEBA petitions. Revisions to sections applying to all cervids are being proposed as well. Staff is also proposing to make related housekeeping changes to Divisions 045 and 200. To avoid duplication with Division 049, staff proposes to remove from Division 045 any definitions specific to cervid holding. Staff also proposes to make permanent a temporary change the Commission made to a portion of Division 200 concerning the sale of meat from privately held elk. The amendment to OAR 635-200-0090 would continue to allow the processing and sale of domestic elk meat subject to certain conditions, by deleting reference to a statute that sunset in early 2008.

PRIMARY POLICY ISSUES

The following presents what the staff believes are the primary policy issues to be addressed in revising Division 049. They were chosen based on the level of interest shown by the Commission at the December 7, 2007 Commission meeting, by public comments on the Preliminary Concept submitted through mid-February 2008, and by public comments received during this rulemaking as of mid-March 2008.

We have not included every issue raised in public comments here; only those we believe most important and deserving of Commission attention are discussed below.

Issues are presented in the order found in the staff's proposed rule revision (Attachment 4). Each is framed in the form of a question. This is followed by a summary of public comments received on each issue. We then provide alternative policy choices starting with the current rule, our proposed revision and one or more alternatives. We conclude each issue with a staff rationale.

Staff has prepared these materials to help the Commission decide whether Division 049 should be revised, and if so, how. Alternative policy choices discussed below are presented as statements rather than in rule text.

PROPOSED REVISION 635-049-0001 POLICY

Question: How should the Commission express its policy toward private holding and propagation of cervids?

Public Comments: Some commenters consider the current rule stating that the Commission opposes the private ownership and commercial use of native cervids to be inflammatory and asked that it be removed.

Some also suggest the Commission should not oppose the hunting of privately held cervids.

Others ask that the current policy statement opposing private ownership and commercial use of native cervids and captive cervid hunting be maintained. They believe that the statement of concern included in the Preliminary Concept falls short of requirements under the Wildlife Policy (ORS 496.012).

Still others were concerned about the risk to Oregon wildlife posed by cervid farming and asked that it be phased out.

Alternatives:

- Current rule – Commission opposes: private ownership and commercial use of native cervids; commercial use of nonindigenous cervids if it poses a risk to native wildlife and their habitats; and, hunting of captive cervids.
- Proposed Revision – Commission is concerned that the unregulated holding of captive cervids poses a disease or genetic risk to the public's wildlife.
- Alternative 1 – Commission promotes the private ownership and commercial use of native and nonindigenous cervids and associated business ventures.
- Alternative 2 – Commission opposes the private ownership and commercial use of cervids. Rule will be revised to eliminate the private ownership and commercial use of cervids in the near future (i.e. 3 to 5 years)

Staff Rationale: Unless the Commission intends to eliminate the private holding and propagation of cervids, staff believes a statement expressing the Commission's concern is more appropriate than one of opposition. A policy statement of concern outlines for staff and others the Commission's basis for the provisions of this Division.

Staff is not proposing to eliminate the holding and propagation of cervids in Oregon.

Staff is not suggesting the Commission change its opposition to hunting of privately held cervids, however, we believe that is adequately addressed in revised section OAR 635-049-0035 below.

PROPOSED REVISION 635-049-0015 BASIC REQUIREMENTS – REQUIREMENT TO HOLD CERVIDS

Policy Issue: Should a license be revoked if a licensee does not continuously hold cervids?

Public Comments: Some commenters feel that a license should be terminated if a licensee doesn't hold cervids for 180 days. Often they suggest that these vacant licenses should be retired or eliminated in an effort to phase-out cervid farming in Oregon.

Others are of the opinion that licensees shouldn't be penalized for liquidating their herds periodically.

Revision Alternatives:

- Current rule –Licenses issued for holding cervids other than fallow deer or reindeer on or before January 20, 1993, will be lost if the licensee fails to renew his/her permit or ceases to hold cervids for 180 consecutive days. Licenses issued after January 20, 1993, are not subjected to the same requirement (current OAR 635-049-0020(8) and 0040(3)).
- Proposed revision – No requirement that a licensee continuously hold cervids.
- Alternative 1 – License relinquished if licensee doesn't continuously hold cervids.
- Alternative 2 – License relinquished if licensee doesn't hold cervids for more than 180 consecutive days.

Staff Rationale: Staff sees no reason that a licensee must continuously hold cervids. Licensees should be allowed to liquidate their inventory periodically as a business matter.

Two Type 1 licensees currently do not hold cervids (Table 1). They may hold these licenses without cervids because they perceive an intrinsic market value of such a limited resource (i.e. 1 of 16) that costs them little (i.e. license fee of \$5 per year) at this time. While the market value of a license is unclear, some licensees believe their Oregon Type 1 license for elk is worth “5 figures” (pers. com. Steve George ODFW). This suggests a license without an associated facility may be worth between \$10,000 and \$100,000 on the open market.

If captive cervid licensing fees are increased to more adequately reflect program cost, as is suggested by some, the incentive to hold a license without animals may be reduced.

PROPOSED REVISION 635-049-0015(2)(C) BASIC REQUIREMENTS – STARKEY EXPERIMENTAL FOREST AND RANGE

Policy Issue: Should the Starkey Experimental Forest and Range (Starkey) be exempted from Division 049?

Public Comments: Some commenters suggest that Starkey should be exempted from Division 049.

Others suggest that exempting Starkey from provisions of Division 049, while requiring others to comply, would be a double standard.

Revision Alternatives:

- Current rule – OAR 635-049-0020(12) may exempt public employees, and as a result Starkey, from Division 049 provisions.
- Proposed Revision – The Director may exempt public agencies holding cervids from Division 049 requirements upon a finding that the operation would not tend to be harmful to existing wildlife populations and would significantly benefit the public.
- Alternative 1 – Do not exempt public agencies from Division 049 requirements.
- Alternative 2 – Specifically exempt Starkey or all public agencies from some or all Division 049 requirements.
- Alternative 3 – Provide a process to exempt any licensee from Division 049 requirements.

Staff Rationale: Staff sees the need for a process to deal with exceptions from the provisions of Division 049 for publicly held cervids under special circumstances. We have proposed that the Director may exempt a public agency holding cervids from provisions of Division 049 on a case-by-case basis.

We believe that public agencies involved in scientific or conservation efforts warrant special consideration. Without this special consideration, the ability to study behaviors and ecology of native cervids or implement conservation efforts would be limited.

The staff's proposed revision would not automatically exempt Starkey from Division 049. The US Forest Service would need to apply for a specific exemption, and the Director would then decide whether to grant it.

We have not proposed a similar exemption process for privately held cervids. These rules are primarily intended to address the private holding and propagation of cervids. They should be as clear and direct as possible. Staff believes establishing a process to generally exempt private licensees from these rules would lead to confusion about what the Commission actually intended in adopting them.

PROPOSED REVISION 635-049-0025(2) IMPORT OR EXPORT – IMPORT OF CERVIDS

Policy Issue: Should import of gametes, embryos and/or live animals be allowed?

Public Comment: Some commenters support the continued ban on the import of live cervids. Some also have reservations about allowing importation of gametes and/embryos.

Other commenters support allowing imports. They often did not make a distinction between gametes, embryos and/or live animals.

Revision Alternatives:

- Current rule – OAR 635-049-0100 prohibits importation of live cervids. Gametes are “cervids” under provisions of Division 045 (Definitions) and, as a result, their importation is prohibited.
- Proposed revision – Importation of gametes and embryos allowed after department approval. Establishment of disease testing and prohibitions for gametes and embryos are included in proposed revised section 635-049-0055. The ban on importing live cervids is maintained.
- Alternative 1 – Allow unrestricted importation of gametes, embryos and live animals.
- Alternative 2 – Allow importation of gametes, embryos and live animals after department approval.
- Alternative 3 – Prohibit all imports.

Staff Rationale: The importation of gametes and embryos will allow licensees the ability to improve the genetic diversity, vigor and fitness of their herds. The genetic hazards associated with importation can be minimized through prior department approval of imports, requirement of herd, sire, and dam pedigree, and genetic testing of the offspring upon birth. The hazard of importing disease can be minimized through requiring documentation of donor disease free status via the Cervid Disease Surveillance List (CDSL). We believe the risk associated with these hazards is low now and will continue to decrease as technology improves.

PROPOSED REVISION 635-049-0025 IMPORT OR EXPORT – EXPORT OF CERVIDS

Policy Issue: Should export of “shooter bulls” be allowed?

Public Comment: In common parlance, “shooter bulls” are bull elk specially bred to maximize their appeal as trophy animals in what is often called a “canned,” “high fence” or “penned” hunt. Under these conditions the purchaser is guaranteed the right to kill a particular class captive bull that has limited, and most often no, opportunity to avoid the purchaser.

Hunting of captive cervids is illegal in Oregon, but legal in some other states. Some private cervid ranches in Oregon export “shooter bulls” to hunting operations in other states.

Some commenters propose a ban on the export of “shooter bulls” consistent with the ban on hunting of captive cervids in current rule. These commenters believe that hunts of captive cervids are unethical.

Others feel this business opportunity should be available to licensees. Some believe restricting what can be done with captive cervids exported from Oregon to another state or country is problematic.

Revision Alternatives:

- Current rule – Doesn't specifically restrict export of shooter bulls.
- Proposed revision – Licensees may export captive cervids (including shooter bulls) provided they comply with Division 049 and ODA requirements.
- Alternative 1 – Prohibit export of all bulls to prevent sale of shooter bulls.
- Alternative 2 – Prohibit export of bulls over 3 years of age to prevent sale of shooter bulls.
- Alternative 3 – Prohibit all exports.

Staff Rationale: Staff has not proposed to restrict export of “shooter bulls.” While we are sensitive to the ethical concerns associated with hunting of captive cervids, we believe it is the responsibility of the receiving state or country to establish its own policies in this regard.

PROPOSED REVISION 635-049-0035 HUNTING OF PRIVATELY HELD CERVIDS PROHIBITED

Policy Issue: Should licensees or their clients be allowed to hunt captive cervids?

Public Comment: Some commenters support allowing a licensee to sell the opportunity for a client to kill a captive cervids in a canned hunt.

Many others object to this practice.

Revision Alternatives:

- Current rule – Prohibits hunting of captive cervids.
- Proposed revision – Prohibits hunting of captive cervids.
- Alternative 1 – Allow hunting of captive cervids by licensees or their clients.

Staff Rationale: Staff proposes to continue the current ban on hunting of captive cervids.

PROPOSED REVISION 635-049-0045 RELEASE OR ESCAPE OF HELD CERVIDS

Policy Issue: Who should bear the cost of recovering escaped or released captive cervids and repairing/rehabilitating associated habitat damage?

Public Comment: Some feel licensees should be responsible for expenses the department might incur in dealing with an escape or release, regardless of how a captive cervid leaves a licensed facility.

Others feel that a licensee should not be responsible for costs associated with an unintentional escape (e.g. caused by vandalism).

Revision Alternatives:

- Current rule – Department may demand reimbursement for expenses associated with recovering or destroying released animals and associated damage to the state’s wildlife and wildlife habitat.
- Proposed revision – Licensee is responsible for state expenses to recover, maintain or dispose of captive cervids regardless of escape or intentional release. Licensee is also responsible for associated damage to wildlife habitat. Licensee must reimburse the state within 30 day of written notification or billing.
- Alternative 1 – Licensee responsible for costs associated only with intentional release. Licensee must reimburse the state within 30 day of written notification.
- Alternative 2 – Licensee is responsible for state expenses to recover, maintain or dispose of captive cervids regardless of escape or intentional release. Licensee is also responsible for associated damage to wildlife habitat. In determining whether to require reimbursement the department shall consider the nature, scope, and environmental impact of a release or escape, as well as licensee promptness and cooperation. Licensee must reimburse the state within 30 day of written notification.

Staff Rationale: The Department’s wildlife programs are supported largely by the sale of licenses and tags to hunters. Staff believes that hunters should not bear the cost if the state is forced to incur expenses or environmental damage resulting from the escape or release of privately-held cervids (regardless of cause).

PROPOSED REVISION 635-049-0065 REQUIREMENTS UPON DEATH OF HELD CERVIDS – TESTING AND REPORTING

Policy Issue: What testing and reporting should be required upon death of a captive cervid?

Public Comment: Some feel that captive cervids should be held to the same disease testing and reporting standards as livestock. They do not propose systematic testing and only annual reporting of test results.

Many commenters note that Oregon elk farming has occurred for more than 30 years. They believe that Oregon’s wildlife has never been negatively impacted by elk farming during this time. Presumably they also feel that requiring systematic disease testing is unnecessary.

Others support provisions included in the Preliminary Concept. Many are very concerned about the disease risk to wild cervids posed by cervid farming. Some desire that the rule be clear: all cervids that die while being held are required to be tested regardless of whether the death occurred offsite (e.g. at slaughter) or not.

Revision Alternatives:

- Current rule – Necropsy required unless death due to “obvious non-disease related cause”. This phrase is not defined. Results due to ODA in 14 days and to department in annual report.
- Proposed revision – All deaths reported to department and ODA within 24 hours of discovery; all cervids tested upon death according to CDSL within 24 hours of discovery; and written results reported to department and ODA directly by laboratory.
- Alternative 1 – Disease testing and reporting of results at licensee discretion.
- Alternative 2 – Exempt animals that die of “obvious non-disease related cause”; specifically define this term (e.g. slaughter or with sign of outward trauma, etc).

Staff Rationale: Staff believes that testing all cervids upon death and timely reporting of test results is an essential requirement in monitoring the health and welfare of cervids held at facilities licensed under provisions of Division 049. Captive cervids are not “livestock” as represented by some. Risk to Oregon’s wildlife from a disease outbreak in an intensively managed cervid herd is greater than that posed by more traditional livestock.

Many who commented on the Preliminary Concept noted that licensees already test their herds for Chronic Wasting Disease (CWD) and bovine tuberculosis (TB). Unfortunately, the results of this disease testing are not reported to the department or ODA. This revision would simply bring into daylight in a timely manner what is already occurring.

Anyone holding cervids is expected to comply with provisions of this section under staff’s proposed revision. Simply transferring a cervid to slaughter does not absolve a licensee of these responsibilities; the cervid is still on their inventory and they are responsible for testing upon becoming aware of its death. Staff doesn’t feel further clarification is necessary.

PROPOSED REVISION 635-049-0065 REQUIREMENTS UPON DEATH OF HELD CERVIDS – BONE PILES

Policy Issue: Should the department regulate disposal of captive cervid carcasses? If so, how?

Public Comment: Some are very concerned about the potential for disease to be spread by cervid carcasses placed in farm bone piles accessible to wild cervids and other wildlife. They recommend requiring that captive cervid carcasses be disposed of so that they are not accessible to other wildlife. Burial, rendering or incineration was suggested.

Revision Alternatives:

- Current rule – No requirements.
- Proposed revision – No requirements.
- Alternative 1 – Require that captive cervid carcasses be disposed of so that they are not accessible to any other wildlife.

Staff Rationale: Staff is concerned that a diseased cervid carcass will end up in a farm bone pile and not be discovered for some time, as in the case of the 2001 outbreak of TB on Rudio Creek Ranch. We agree that if an undiagnosed diseased cervid is placed in a bone pile there is potential for disease to directly or indirectly spread to wild cervids.

Many bacterial or viral pathogens are not likely to survive long on a carcass in the environment. Environmental conditions (desiccation, temperature, acidity, etc.) and the carcass decomposition process all conspire to neutralize many pathogens in a short period (days). As a result, the potential that either another cervid or other animal visiting a site might become infected and spread the disease to other areas is limited. The 2001 Rudio Ranch TB event is a good example of this. Even though it was some time before TB was diagnosed and other animals had access to the carcass, there is no indication other wildlife were affected.

Some pathogens, however, remain viable in the environment for longer periods. *Brucella abortus* and CWD (Miller and Williams 2003) are examples of these hazards and are of concern.

The CDSL and the associated testing of all cervids that die are intended to address this hazard (see 635-049-0055 and 0065). As noted above, we have proposed that all cervid deaths be reported and tested according to the CDSL within 24 hours of discovery and the results of this testing be reported immediately and directly to the department and ODA. We believe this requirement provides the ability to manage risk posed by a diseased carcass being placed in a bone pile, and that additional requirements are not necessary.

Should the Commission decide not to disease test all cervids upon death, staff recommends requiring that cervid carcasses be disposed of in such a manner so that they are not accessible to wildlife (including birds; see Alternative 1).

PROPOSED REVISION 635-049-0075 GENETIC REQUIREMENTS

Policy Issue: Should licensees be required to comply with specific genetic standards? What should those standards be and how should compliance be determined?

Public Comment: Some commenters believe that Oregon captive cervids are genetically pure. There is no way, currently, to confirm or refute this claim.

Some also believe there is little genetic difference between captive and wild Oregon elk and as a result genetic restrictions are unnecessary.

Others believe that the superior genetics of captive cervids from selective breeding could be used to improve Oregon's elk herds.

Some suggest that genetic testing only be required in association with importation.

Others express support for the genetic requirements included in the Preliminary Concept.

Revision Alternatives:

- Current rule – Any red deer or non-indigenous hybrids were to be removed from the state, destroyed or sterilized before January 1994.
- Proposed revision – License will specify species, subspecies and/or hybrid that can be held. Upon demand licensee must verify genetics of calves or fawns resulting from artificial insemination or embryo implantation; department may test genetics of any captive cervid; licensee must test all cervids held if an unauthorized cervid is found; and, licensee must dispose of unlicensed cervids within 30 days of department notice.
- Alternative 1 – No genetic requirements
- Alternative 2 – Licenses restrict cervids that can be held at the species level (i.e. no subspecies or hybrid restrictions).
- Alternative 3 – Licenses restrict cervids that can be held at the subspecies level (i.e. no hybrids allowed).
- Alternative 4 – Require that licensees certify that held cervids are consistent with license provisions; test only for specific cause (e.g. outward appearance or behavior suggestive of red deer).
- Alternative 5 – Require that all Type 1 licensees genetically test all cervids in their herd as directed by the department and report the results of these tests to the department by December 31, 2008. All fawns, calves and transferred cervids must be genetically tested as directed by the department and reported within 30 days of birth or acquisition. All unauthorized cervids must be disposed of within 30 days of notice by the department.

Staff Rationale: Staff believes it important that licenses specify the authorized subspecies or hybrid so there is no misunderstanding of what cervid a licensee is allowed to hold.

It is also important that provisions in this rule provide a mechanism for the department to ensure that a licensee is holding cervids consistent with their license.

We believe that the proposed revision provides a fair and practical approach to this issue.

It is difficult to assess what risk or benefit the release of a highly-breed captive cervid might pose to wild cervids. Scientific consideration of this issue has not developed to the point that supportable conclusions can be drawn either way.

What is clear is that a cervid bred specifically for a commercially valuable physical attribute (e.g. antler score, velvet production, meat) is, very likely, not the same as an elk bred to successfully compete in the wilds of Oregon. Until we learn otherwise, we believe the prudent course is to keep captive and wild populations separate.

PROPOSED REVISION 635-049-0085 LICENSES GENERALLY – LICENSE TERM AND RENEWAL

Policy Issue: What should the term of a license be?

Public Comment: Some suggest that the requirement to annually renew a license should be eliminated. A license should be valid until licensee relinquishes it.

Revision Alternatives:

- Current rule – Licensee must apply to renew a license annually; no absolute term.
- Proposed revision – License must be renewed annually, but is valid as long as licensee complies with requirements of Division 049 (see proposed revision of 635-049-0195 for additional requirements). No absolute term.
- Alternative 1 – License is valid as long as licensee complies with requirements of Division 049; no need to renew.
- Alternative 2 – License is valid for a specific term (e.g. 10 years); license must be renewed or terminated at that time.

Staff Rationale: Staff believes requiring annual renewal is an important point of communication with each licensee. We believe it is reasonable that a license be valid as long as a licensee complies with provisions of Division 049 and pays necessary fees or until he/she/they relinquish the license.

PROPOSED REVISION 635-049-0085 LICENSES GENERALLY – LICENSEE

Policy Issue: Who can a license be issued to?

Public Comment: Some suggest a license should be specific to an individual.

Some suggest that use of the term “holder” in the Preliminary Concept would endow a licensee with irrevocable rights.

Revision Alternatives:

- Current rule – Licensee can be an individual, partnership or corporation.
- Proposed revision – Refers to a license holder which can be an individual, partnership, corporation or other legal entity (as noted in 635-049-0175(1)(d)). A license is specific to a holder and facility.
- Alternative 1 – Licenses are restricted to a specific individual only.

Staff Rationale: Staff believes it is unreasonable to require that licenses be limited to individuals. Cervid farming is often a business venture in Oregon. We see no reason to limit the ability of these ventures to take advantages of the benefits associated with partnerships or incorporation if they deem it is in their interest.

PROPOSED REVISION 635-049-0135 GENERAL REQUIREMENTS FOR HOLDING CERVIDS – HERD DENSITY

Policy Issue: Should Division 049 limit the herd density allowed under an individual license?

Public Comment: Some commenters feel a herd density limitation should be required. They believe language in the Preliminary Concept was inadequate to assure captive cervids are treated humanely and limit the potential for transmission of disease. Maximum densities suggested ranged from one to 10 elk per acre.

Revision Alternatives:

- Current rule – None.
- Proposed revision – None.
- Alternative 1 – Require that licensed elk be held at densities of 10 or fewer elk per acre.

Staff Rationale: Staff prefers the broader standard included in the proposed revision requiring that facilities be in a sanitary condition and adequate room for exercise be provided. Healthy densities will vary by time of year (e.g. breeding season, calving season, etc), site (e.g. bunk feeding, pasture, open range, etc) and operational requirements. The standards cited in the proposed revision are based on existing statute. Staff sees no reason to require otherwise.

PROPOSED REVISION 635-049-0145 SALE OR EXCHANGE – MEAT AND BY-PRODUCTS

Policy Issue: Should there be any restrictions on the sale of captive elk meat and byproducts?

Public Comment: Some suggest that limiting the ability of a cervid farmer to sell elk meat is unreasonable.

Revision Alternatives:

- Current rule – Purchase, sale or exchange of meat from captive cervids is governed by OAR 635-200-0090. Some restrictions apply (e.g. sale of meat from captive elk allowed only from licensed cervid facility and if slaughtered and processed at a USDA certified facility and under ODA rules; restriction on sale of antlers and mounts).
- Proposed revision – Leaves all provisions the same, except to clarify rule allowing sale of meat from captive elk under certain circumstances (by removing reference to statute that sunset recently).
- Alternative 1 – Restrict sale of captive elk meat and byproducts (e.g. no antlers or meat may be sold).

- Alternative 2 – Broaden ability to sell captive elk meat and byproducts (e.g. allow sale of full mounts after registration and pinning).
- Alternative 3 – Explicitly allow import of captive elk meat and byproducts.

Staff Rationale: Statute allowing the sale of meat from domestic elk (under certain conditions) expired January 2, 2008 and was not legislatively renewed (Section 4, Chapter 783, Sections 2 and 4, Oregon Laws of 2001; also see also Division 635-200-0090).

In response, the department Director approved an emergency, temporary rule that continued to allow sale of domestic elk meat by removing reference to the expired statute. The staff’s proposed amendment of OAR 635-200-0090 is simply intended to make permanent that temporary rule. In other words, staff proposes no change from the status quo.

PROPOSED REVISION 635-049-0165(3)(a) TYPE 1 CERVID LICENSES – NUMBER OF TYPE 1 LICENSES AVAILABLE FOR ELK

Policy Issue: How many Type 1 licenses should be available?

Public Comment: Some suggest phasing out cervid farming in Oregon. Of these commenters, most suggest licenses be phased out through attrition; licenses should be retired as they are abandoned, surrendered, terminated or determined to be in non-use. Under this approach, transfer of licenses to another holder or location would not be allowed.

Some suggest that Oregon or private entities buy out existing elk licenses to retire them.

Some suggest removing the limit of 16 Type 1 licenses for elk. They favor increasing the number of Type 1 licenses.

Revision Alternatives:

- Current rule – No more than sixteen (16) Type 1 elk licenses are available; non-elk Type 1 licenses are limited to those issued before January 20, 1993; and an unlimited number of licenses are available for Director-approved scientific, conservation or education purposes.
- Proposed revision – Sixteen (16) Type 1 elk licenses are available for commercial or exhibition purposes; non-elk Type 1 licenses are limited to those issued before January 20, 1993; and an unlimited number of licenses are available for Director approved scientific, conservation or education purposes.
- Alternative 1 – Allow for an unlimited number of Type 1 licenses; allow unrestricted transfer between licensees.

- Alternative 2 – Allow for some increase in the number of Type 1 licenses (e.g. 20 elk licenses and/or 20 non-elk); allow transfer between licensees upon Commission approval.
- Alternative 3 – Restrict transferability of licenses between parties; retire Type 1 licenses as they become available.
- Alternative 4 – Eliminate licenses in a defined timeframe by lottery (e.g. two drawn and eliminated each year for 10 years).
- Alternative 5 – Eliminate all Type 1 licenses effective December 31, 2008.

Staff Rationale: Staff intends to clarify and maintain the status quo. The number of Type 1 licenses available under current rule does not change with this revision.

PROPOSED REVISION 635-049-0185 LOTTERY FOR ELK LICENSES FOR COMMERCIAL OR EXHIBITION PURPOSES

Policy Issue: How should available Type 1 commercial and exhibition licenses be awarded to new licensees?

Public Comment: Many commenters suggest that the lottery to distribute Type 1 licenses for elk be eliminated. Commenters suggesting that more or unlimited elk licenses be available feel that the lottery is unnecessary. Commenters suggesting that elk farming in Oregon be phased out as licenses are relinquished or terminated felt the same.

Revision Alternatives:

- Current rule – Available new licenses are awarded to qualified applicant(s) by lottery.
- Proposed revision – Department may choose to allocate an available Type 1 license for commercial and exhibition elk by lottery.
- Alternative 1 – Distribute available Type 1 licenses for commercial and exhibition elk on a first-come, first-served basis for all applicants that qualify.
- Alternative 2 – Distribute available Type 1 licenses for commercial and exhibition elk on merit.
- Alternative 3 – Distribute available Type 1 licenses for commercial and exhibition elk through a bidding process.
- Alternative 4 – Eliminate available Type 1 licenses for commercial and exhibition elk as they become vacant.

Staff Rationale: Staff is not proposing to change the number of Type 1 licenses available for commercial and exhibition of elk. As there are only a limited number of licenses, some mechanism is needed to distribute licenses as they become available.

We believe awarding an available license by lottery of qualified applicants is the best way to allocate available licenses. It's fair to all qualified applicants and would limit the potential for some to conclude the allocation was based on a department bias or preference.

PROPOSED REVISION 635-049-0245 FENCING REQUIREMENTS – DOUBLE FENCING

Policy Issue: Should double perimeter fencing be required for Type 1 facilities?

Public Comment: Some feel that double fencing is necessary to protect wild cervids from diseases that might occur on a cervid farm. Many believe that controlling a disease outbreak in wild cervids, caused by farmed cervids, would be very difficult and expensive and would have severe ramifications to Oregon wildlife, hunting and associated wildlife economy.

One commenter is concerned that illegal importation of captive cervids poses an important source of disease risk.

Others believe that double fencing is unnecessary. They feel that double fencing is an extreme financial imposition on licensees; current cervid farms are disease free and there is no indication that current cervid farming operations have ever placed wild cervids at risk in over 30 years. Some commenters indicate that double fencing would force some existing Type 1 licensees out of the farmed cervid business.

Others note that double fencing might reduce the tourism value of cervid farms by obscuring view of the held cervids to some degree.

Some suggest cervid farmers should be responsible for installing a second perimeter fence line if required. Others suggest that there should be some form of cost share or the department should be responsible if double fencing is required for existing licensees.

Revision Alternatives:

- Current rule – Single line fencing is required.
- Proposed revision – Two parallel lines of perimeter fencing separated by at least 10 feet are required. Double perimeter fencing to be in place by December 31, 2010 for facilities licensed as of April 1, 2008.
- Alternative 1 – Provide more (e.g. 10 years) or less (e.g. one year) time to comply with these provisions.
- Alternative 2 – Require that double fencing be implemented at a licensed facility if a diseased cervid is identified there.
- Alternative 3 – Require that double fencing be implemented at all licensed facilities if a diseased cervid is identified at any licensed facility.
- Alternative 4 – Require less effective forms of double fencing (electric, high tensile 8-strand wire).

- Alternative 5 – Require double fencing but suspend implementation until a cost sharing program is available for existing licensees. Double fencing must be implemented as a condition of any license transfer (either location or holder).

Staff Rationale: Double fencing is proposed as a precautionary measure to reduce the potential for transmission of disease into or out of a licensed facility. It is the most controversial issue addressed in the proposed revision. A decision on double fencing turns on: (1) the risk; (2) disease transmission; and (3) relative cost. Staff discusses each of these topics before summarizing our conclusion below.

Risk

Requiring double fencing or not comes down to how much disease risk captive and wild cervids pose to each other and who should accept the responsibility to address this risk.

Market-driven movement of animals between locations can distribute disease over broad geographic areas. CWD, for example, has been inadvertently spread much more widely via market-driven movements of infected, farmed elk and deer than would have occurred through natural processes (Miller and Williams 2004). Lateral transmission between infected and uninfected animals coupled with animal movements, is the most important factor in the spread of CWD (Salman 2003).

Cervids can be infected with CWD or TB, yet not test positive for years. The TB-infected elk at Rudio Creek Ranch had tested negative numerous times. Fencing would reduce the risk of seemingly healthy but, in reality, infected elk interacting with healthy wild elk at the fence line, or vice versa.

Staff has already proposed a number of measures to reduce the disease risk that captive cervids pose to wild cervids (e.g. disease testing, ban on import of live cervids, etc). Unfortunately, these measures do not reduce this risk to zero. As was demonstrated in the Rudio Creek Ranch TB incident, disease testing of cervids is not entirely reliable. As noted in the discussion on revision to 635-049-0175 (License application – Security requirement) and discussed below responding to a disease outbreak could be very expensive. If a serious disease makes it into the wild, Oregon’s wildlife-related economy will suffer and state resources will need to be reallocated from current wildlife management activities and landowner support programs to address this disease threat.

Requiring cervid ranchers to double fence places them in the position of assuming risk: they will be required to build an expensive capital feature that doesn’t contribute directly to their bottom line. If a disease outbreak never occurs they may have wasted these resources.

Not requiring double fencing places Oregon’s wildlife and related economies in the position of assuming risk: a disease outbreak that moves from a captive herd to the wild could devastate hunting and non-consumptive opportunity. Resources currently allocated

to hunter, landowner and non-consumptive user programs would need to be redirected to disease management.

Disease Transmission

While there are a number of diseases of concern when considering the management of captive and wild cervids, bovine tuberculosis (TB) and CWD are most often mentioned. Below we summarize what is known about these two diseases.

TB is a disease of the respiratory system caused by bacteria. It can infect cervids, humans and livestock and has been the focus of a national eradication effort since the early 1900's. It currently occurs at a low rate in the United States. While livestock tests can be used to determine whether a cervid has TB, they are not reliable. An Oregon captive elk was diagnosed with TB in 2001. It is likely this animal had TB when it was imported to Oregon, even though it had tested negative for the disease more than once.

CWD is the focus of many research, treatment and eradications efforts throughout North America. It is the only transmissible form of spongiform encephalopathy, or prion disease, in the wild and has been found in both captive and wild deer and elk populations. The disease is extremely contagious and epidemics are self-sustaining in both captive and wild populations (Miller et al. 1998 and 2000). The disease is always fatal and is remarkably persistent in the environment; a contaminated location can remain infective for years. CWD can be difficult to diagnose in early stages of infection and there is no reliable live test available for elk. Examination of brain stem or lymphatic tissue at death provides the definitive diagnosis. Since CWD is so difficult to diagnose and contagious, an infected animal may have shed the infectious prion for years prior to it being detected placing associated captive and wild cervids at risk (Salman 2003, Williams and Miller 2003, M. W. Miller, unpubl. data). CWD has not been found in Oregon. A map of the distribution of CWD in North America can be found at:

<http://www.cwd-info.org/index.php/fuseaction/about.map>

In studies conducted by leading researchers in the fields of microbiology, veterinary medicine and disease ecology, TB and CWD have been shown to be transmitted through direct contact between infected and uninfected cervids (Mathiason et al. 2006, Miller and Kaneene 2006, Miller and Williams 2004, Palmer et al. 1999, Palmer et al. 2004). Both are highly infectious and contagious diseases passed from one individual to another. Close association of infected with uninfected animals increases the probability of transmission. Separation of infected from uninfected animals using distance and barriers significantly decreases the risk of transmission (Vercauteren 2007a).

Congregation of animals also increases the potential for disease transmission. Cervid social behavior predisposes them to animal to animal contact. Fence lines concentrate movement patterns and tend to bring cervids together even in the wild. Documentation of fence line contact between wild and captive cervids has been demonstrated in a variety

of studies (Vercauteren et al. 2007a, 2007b). This contact increases during specific periods, such as the rut.

It appears CWD can also be passed from an infected animal to an uninfected animal through a contaminated environment. Fecal material, urine and saliva are considered vehicles for this dissemination (Williams and Miller 2003). Additionally, recent research has found that soils and forage, under favorable conditions, can be a source of CWD infection for years (Johnson et al. 2006). It is believed animals can become infected after ingesting CWD prions as they consume contaminated forage or soil. Because prions can remain effective for years, movement of contaminated soil by wind and water through normal erosion process is a concern (Johnson et al. 2006).

Some commenters have questioned whether CWD, bovine tuberculosis and other diseases can be readily transmitted through nose-to-nose contact or other close proximity between captive and wild cervids. While there is some uncertainty about the actual mechanism of transmission for some diseases, it is certain that putting an un-diseased animal in close proximity to diseased animals will increase the likelihood that the disease will spread. The more completely you separate these two populations the more likely it is you can stop an epidemic.

Relative Cost

Double fencing is an expensive endeavor for an individual cervid farmer. Staff estimates it will cost \$26,000 per mile to construct an interior fence line (Table 3). Using this figure and making some simple assumptions (e.g. a square property boundary, etc) suggests that double fencing would cost from \$4,000 for the smallest licensed facility to \$116,000 for the largest (Table 4). Recognizing that the real world is more complicated than that represented by our assumptions, we suggest doubling these figures to more closely estimate what the actual cost might be. Some facilities, however, are partially or completely double fenced now and would not experience this whole cost (e.g. Oregon Zoo, Patterson Ranch, etc). Regardless, our estimates suggest it would cost between \$700,000 and \$1,500,000 to build interior perimeter fences for all Type 1 facilities in Oregon.

Some land would be lost to cervid farming if double fencing was required. Actual area lost varies depending on facility size and ranges from 20% for the smallest facility to less than 1% for the largest (Table 5).

It's difficult to determine what the real impact of these costs is to an individual licensee. We know little about financial structure of Oregon's captive cervid operations. They are private endeavors and understandably reluctant to release their business structure. Some aspects of this business appear to involve significant revenue as evidenced by a recent auction where an individual elk was sold for more than \$20,000. In addition, online business prospectuses suggest a profitable enterprise is possible. However, without knowing more specifics about a particular operation, it is impossible to determine the impact of adding the cost of double fencing.

Treating a disease outbreak at a cervid farm could be expensive and difficult. Responding to a disease outbreak transmitted to the wild will be exponentially more expensive and potentially beyond our ability to contain. This has been the experience in Colorado for Chronic Wasting Disease (pers com Dr. Michael Miller, CDOW), and in Michigan and Minnesota for TB (Schmitt 2002).

It is impossible to estimate the cost at a landscape scale. From an ecological standpoint, one of several major factors in global emerging infectious diseases is associated with "spill-over from domestic animals to wildlife populations living in proximity" (Daszak et al. 2000). The biological implications once major diseases enter the wildlife population and serve as reservoirs of pathogens is the threat to other domestic animals, human health and to the conservation of global biodiversity.

Conclusion

Many thoughtful, well meaning people have come to different conclusions on this issue.

The real policy question is: who should bear the risk of protecting wild cervids from a captive cervid disease; licensed cervid holders or Oregon hunters and general taxpayers? Given that cervid holding is typically a commercial, for-profit operation, it seems fair the holders should assume this risk. Oregon hunters and taxpayers (many of whom oppose private cervid holding) should not be expected to bear the risk caused by a private, commercial operation.

We believe that disease passing from a licensed cervid farm to native cervids living in the vicinity is a significant risk and poses a financial risk to state government, hunters and taxpayers. As a result we believe a precautionary approach is needed. This means requiring implementation of double fencing over a reasonable period. We believe the protection provided by double fencing is a more secure choice for the future of both captive and wild cervid management in Oregon.

The staff proposal would allow cervid licensees two and a half years to implement double fencing. This would give them the time to seek out the most cost-effective methods. For example, if the 16 licensed elk holders banded together, they might be able to negotiate a less-cost contract from fencing contractors. Also, the time would allow them to search for grants or to ask the legislature for cost-sharing funds.

Staff believes that a cost sharing program to assist current Type 1 farmer is a reasonable alternative. A cost sharing program would distribute risk between licensees and others.

We have not proposed a cost sharing program at this time because there is little consensus between the parties that would need to participate.

PROPOSED REVISION 635-049-0255 CERVID MARKING

Policy Issue: What marking should be required for Type 1 cervids?

Public Comment: Many commenters oppose excessive marking and reporting requirements, although specific objections to either current rule or the Preliminary Concept were not provided.

Others support provisions included in the Preliminary Concept.

Revision Alternatives:

- Current rule – All captive cervids must be marked with a mark registered with ODA visible from 50 feet and unique to the licensee; ODA registration must be provided to the department; and all captive native cervids must have an additional permanent mark unique to the individual animal implanted or applied within 14 days of birth or purchase.
- Proposed revision – Type 1 cervids must be marked with a permanent mark approved by the department and two identically numbered ear tags, one in each ear. Marks and tags must be applied within 14 days of birth or acquisition and registered with the department within 30 days of application. Licensee must comply with applicable ODA marking and registration requirements.
- Alternative 1 – Require ear tags only.

Staff Rationale: Staff believes that the proposed revision is simpler and more direct than that in the current rule.

PROPOSED REVISION 635-049-0265 TRANSPORT OF CERVIDS AMONG LICENSED FACILITIES

Policy Issue: Should a permit be require to transport Type 1 cervids?

Public Comment: Many commenters oppose restricting intra-state movement of Type 1 cervids. They felt that restricting movement within Oregon would impact the genetic diversity of farmed herds. These commenters don't specifically oppose the Preliminary Concept requiring a transport permit to move cervids from one licensed facility to another.

Others support provisions included in the Preliminary Concept requiring a transport permit.

Revision Alternatives:

- Current rule – Captive cervids may be transferred between licensees.
- Proposed revision – Captive cervids may be moved between licensed facilities after receiving a permit issued by the department.
- Alternative 1 – Restrict the transfer of cervids between facilities.

Staff Rationale: Staff has proposed a transfer permit to foster more timely communication between a licensee and the department. Under current rule, reporting of a transfer is only required at license renewal (once a year). We believe more timely communication is necessary to reduce the potential for misunderstanding between a licensee and the department and to develop a database to assist with tracking a potentially diseased animal. This would allow quicker response to protect captive cervids, livestock, the public and wildlife in case of a disease outbreak.

PROPOSED REVISION 635-049-0275 REQUESTING CHANGES TO A LICENSE

Policy Issue: Should private trade in Type 1 commercial and exhibition elk licenses be restricted?

Public Comment: Many commenters oppose restriction of Type 1 license transfers.

Others oppose the transfer of Type 1 licenses. Some suggest that licenses should be tied to a specific licensee and location. They feel that a license should be eliminated when it is relinquished by or revoked from the existing holder.

Revision Alternatives:

- Current rule – Department shall approve or disapprove transfer of a Type 1 cervid facility license after considering the financial ability, operating plans, criminal background and moral turpitude of the controlling interest.
- Proposed revision – Change in Type 1 license ownership or facility location requires a new license application and Commission approval.
- Alternative 1 – Do not allow transfer of Type 1 licenses.
- Alternative 2 – A license and its associated facility may be transferred after the potential license holder submits an application and receives approval by the Commission. License reverts to the department for reallocation if it is separated from its associated facility.
- Alternative 3 – Do not restrict transfer of licenses.

Staff Rationale: Staff has proposed that transfer of a license be approved by the Commission to ensure the fair and even treatment of license transfer. Unless the Commission is determined to eliminate Type 1 licenses we believe some form of transfer is reasonable.

Requiring that a license revert to the department for reallocation if it is separated from its approved facility has merit. It would simplify the issues to be considered in the transfer in that the site has already been approved. It would also eliminate the resale value of a license alone, allowing others a chance to obtain a license through the distribution process approved by the Commission in 635-049-0185.

PROPOSED REVISION 635-049-0285 DECOMMISSIONING

Policy Issue: What standards should be required upon relinquishment or revocation of a Type 1 license?

Public Comment: Some suggest that facility fences should be maintained for at least two years once a license is suspended, revoked or relinquished to prevent wild cervids from accessing areas formally inhabited by captive cervids. This is to prevent the potential transmission of any diseases found in the captive population to the wild population.

Some suggest that the department should state how long a facility fence must remain in place after a license has been relinquished and captive cervids have left, suggesting that more than a two-year decommissioning period may be necessary.

Revision Alternatives:

- Current rule – None.
- Proposed revision – Perimeter fencing must remain in place to prevent wild cervids from accessing areas previously inhabited by captive cervids. Licensee may petition department to remove perimeter fencing.
- Alternative 1 – Require perimeter fencing to remain in place for a specific period (e.g. 1 to 10 years).
- Alternative 2 – Allow fence removal at licensee discretion.

Staff Rationale: It's clear that some cervid diseases, particularly CWD (Miller and Williams 2004), can remain infective in the environment for some time. No “one size fits all” decommissioning standards exist for such circumstances. Site-specific conditions will be important in determining how soon to allow wild cervids into a decommissioned Type 1 facility.

With so many unknowns, staff would prefer the flexibility to look at each decommissioning on a case-by-case basis and coordinate with its sister agencies (ODA, USDA, etc) before approving that fences be removed. Fences around a well-maintained facility with good records and no incidence of disease can be removed soon after cervid farming is terminated. In the worst case situation, a farm with a history of problems ending with a serious CWD outbreak and subsequent owner bankruptcy, there may be many issues to work through before wild cervids can safely be allowed access.

Requiring that fences remain in place until the department approves their removal provides maximum flexibility to accommodate the needs of Oregon.

PROPOSED REVISION 635-049-0295 LICENSE APPLICATION – SECURITY REQUIREMENT

Policy Issue: Should licensees be required to provide evidence of security (e.g. bonding, business insurance, irrevocable letter of credit, etc) to indemnify the state for its expenses if it is forced to act to remedy a facility specific problem?

Public Comment: Some suggest that Type 1 licensees be required to obtain bonding, insurance or some other form of security to ensure the state can recover expenses associated with a disease outbreak at or an escape/release from a licensed facility. They suggest that licensees should be required to show evidence of this surety at time of licensing and license renewal.

Others feel that surety is unnecessary because Oregon's elk farms are disease free, healthy and genetically pure. They note that other farmers and ranchers are not required to obtain surety to indemnify the state and feel it is an unnecessary expense.

Revision Alternatives:

- Current rule – Bonding, business insurance or other form of security is not required.
- Proposed revision – Bonding, business insurance or other form of security is required.
- Alternative 1 – Evidence of bonding, business insurance, irrevocable letter of credit or other form of security equivalent to \$1,000,000 per occurrence indemnifying the state for all expenses associated with a licensee's operation is required at time of licensing coverage to include:
 - Licensed cervid escape and/or release;
 - Disease or parasitic outbreak that has the potential to affect wild cervids; and,
 - Collapse of licensee administrative structure requiring the state to assume control of facility operations until captive cervids can be disposed of.

A bond or other form of security is required to indemnify the state from expenses associated with the most expensive of these.

Staff Rationale: The proposed revised rule developed for the Notice of Proposed Rulemaking issued March 1 did not propose requiring bonding, business insurance or other form of security. Staff has since concluded that it should be required. Our rationale is provided below.

Oregon hunters and taxpayers should not bear the cost the department may incur when responding to a disease outbreak or escape/release of cervids from a licensed facility. Various sections of the rule amendments would require the holder to reimburse the department for such cost. However, those requirements are only as good as the financial stability and goodwill of the particular license holder. For that reason, staff now proposes to require some kind of financial security from each license holder. We propose to soften the impact of this new requirement by delaying implementation until license renewal and giving holders some flexibility in selecting the type of security that best fits their operation

The risk of disease outbreaks and releases/escapes of captive cervids is real. The cost of responding to an event is variable depending on the promptness and cooperation of the licensee and type of problem. The following are examples:

- March 2007, 27 captive elk escaped from the Patterson Elk Ranch near Sisters, Oregon, after double fencing was cut. The elk were captured quickly due to the prompt response of farm personnel. Department staff expended about 2 days of effort, worth approximately \$1,000, responding to this event and the subsequent investigation. We estimate it could have cost as much as \$1,500 per animal or \$40,000, for the state to recapture these elk if the licensee had not been so responsible. This estimate is based on the cost of routine department wildlife capture efforts via helicopter (pers. com. Craig Foster ODFW).
- September 2006, 160 elk escaped from a private game farm near Rexburg, Idaho. The state of Idaho spent approximately \$60,000 dealing with this escape (pers com. Terry Thomas IDFG).
- November 2001, a captive elk with TB was found at the Rudio Creek Ranch near Monument, Oregon. According to news reports, over \$1,000,000 was spent on this incident; most if not all of it federal funding. Over \$700,000 was spent to reimburse the ranch owner for precautionary euthanization of the captive elk and cattle. We estimate the department spent \$60,000 of Other Funds (i.e. mainly license revenues) investigating and responding to this incident. The department was not reimbursed for these expenditures. If TB had moved to the wild we expect it would have cost the department more than \$300,000 for remediation (pers com Craig Foster ODFW). No federal programs would have been available to assist with these costs.

The policy question here is: who should bear that risk? Unless the department is protected, the cost will come out of the department's budget. Because the department's wildlife activities are supported largely by license and tag revenues, in reality this means that Oregon hunters would bear that financial risk. If license and tag revenues are insufficient and the legislature chooses to use General Fund monies instead to pay the department's response costs, Oregon taxpayers would bear this risk.

Staff suggests that licensed holders, who stand to profit from holding captive cervids, should bear the risk by providing the department with some kind of financial security. The financial security would be designed to cover response costs in the event that the holder is unable or unwilling to reimburse the department.

Some Oregon agencies require permittees to provide financial security to protect the state from similar costs. For example, the Department of Geology and Mineral Industries requires recipients of surface mining permits to provide financial security to ensure performance of mined land reclamation. The Department of State Lands requires recipients of permits for removal or filling in wetlands to put up financial security to ensure performance of wetland mitigation plans.

The department has conferred with these state agencies and with insurance agents. Staff proposes adding a provision that would require a cervid license holder to provide financial security in the amount of \$1,000,000 per occurrence to protect the state from risk. The range of security products could include (but not be limited to) a surety bond, an irrevocable letter of credit or a certificate of deposit.

Table 1. Type 1 licenses as of March 20, 2008

Licensee	Location	Species	Number [‡]	Type
John R. Kelly	Astoria	Roosevelt Elk	0	Commercial/Exhibition
Stanley G. Hermens	Wallowa	Rocky Mt. Elk	48	Commercial/Exhibition
Allen & Kay Woosley	Aumsville	Sika Deer	5	Commercial/Exhibition
Oregon Zoo	Portland	Roosevelt Elk	3	Zoo
Terry Kieling	Woodburn	Sika Deer	13	Commercial/Exhibition
Karl Johnson	Bend	Sika deer	21	Commercial/Exhibition
Lewis & Judith Parent	Milton-Freewater	Rocky Mt. Elk	32	Commercial/Exhibition
Mark Rosenberg	Pendleton	Rocky Mt. Elk	1	Commercial/Exhibition
William McCamman	Clackamas	Roosevelt Elk	12	Commercial/Exhibition
West Coast Game Park, LLC.	Bandon	Black-tailed Deer	2	Zoo
		Muntjac deer	5	
		Roosevelt Elk	4	
Pardwood LLC.	Prineville	Rocky Mt. Elk	16	Commercial/Exhibition
Steve & Kathy Simpson	Terrebonne	Rocky Mt. Elk	244	Commercial/Exhibition
Sheldon & Carol Kirk	Weston	Rocky Mt. Elk	89	Commercial/Exhibition
Lonnie & Louise Woosley	Florence	Roosevelt Elk	30	Commercial/Exhibition
Alan & Brenda Ross	Molalla	Roosevelt Elk	84	Commercial/Exhibition
Jeffrey King [§]	Medford	Roosevelt Elk	0	Commercial/Exhibition
Wildlife Safari	Winston	Roosevelt Elk Sika Deer	24	Zoo
			55	
Donald & Marina Kelly	Astoria	Roosevelt Elk	59	Commercial/Exhibition
Ochoco Valley Ranch, LLC.	Bend	Rocky Mt. Elk	92	Commercial/Exhibition
		Roosevelt Elk	15	
Frank McCubbins	Sweet Home	Sika deer	12	Commercial/Exhibition
Richard Patterson	Sisters	Rocky Mt. Elk	295	Commercial/Exhibition
Mike & Cindy Kilpatrick	M. Vernon	Rocky Mt. Elk	65	Commercial/Exhibition
Lois Jordan and Judy McDonald	Yoncalla	Black-tailed Deer	1	Commercial/Exhibition
		White-tailed Deer	1	
		Muntjac deer	9	
		Roosevelt Elk	23	
USDA Forest Service Research Station	La Grande	Rocky Mt. Elk	51	Research

Note: [§] Not renewed for 2008; [‡]Numbers based on inventory submitted for 2008 license renewal (pers. com. Pete Test ODFW)

Table 2. Type 2 licenses as of March 20, 2008

Licensee	Location	Species	Number [‡]
Animal Adventures Unlimited Inc.	Grants Pass	Fallow Deer	18
Ardith De Jong	Burns	Fallow Deer	2
Arthur Roberts	Lebanon	Fallow Deer	11
Burton Tarabocha	Bend	Fallow Deer	12
Carl Hansen	Oregon City	Fallow Deer	15
Cindy Murdoch	Marcola	Reindeer	4
Curtis Holum	Estacada	Fallow Deer	38
Dennis Standish	Kerby	Fallow Deer	12
Ed Troyer	Newport	Fallow Deer	130
George Throop	Albany	Fallow Deer	21
Henry Blagden	Prairie City	Fallow Deer	277
Kenneth & Barbara Combs	Redmond	Fallow Deer	17
Leonard Ferrara	White City	Fallow Deer	45
Lloyd Reagan	Union	Fallow Deer	18
Melinda Golis	Central Point	Fallow Deer	10
Michael Dewar	Gaston	Fallow Deer	16
Mike Kunert	Roseburg	Reindeer	4
Muriel Seal	Astoria	Fallow Deer	3
Operation Santa Clause, Inc	Redmond	Reindeer	41
Richard Bentley	Molalla	Fallow Deer	35
Richard Findley	Bend	Fallow Deer	19
Scott & Cindy Maier	Bend	Fallow Deer	23
Stephen Pederson	Bend	Fallow Deer	33
Todd Erickson	Carlton	Fallow Deer	78
Tom & Carol Schoen	Hillsboro	Fallow Deer	4
West Coast Game Park, Inc	Bandon	Fallow Deer	86
		Reindeer	5
Wildlife Safari	Winston	Fallow Deer	42

Notes: [‡]Numbers based on inventory submitted for 2008 license renewal (pers. com. Pete Test ODFW)

Table 3. Estimate of the per mile cost of constructing a Type 1 cervid fence as proposed in the proposed Revision of Division 049

Fencing Height

- Fencing Height: 8 feet above ground level for the entire length

Perimeter Fencing

- 6' Woven Wire Mesh with 6 " vertical spacing and graduated horizontal spacing from 3" at the bottom to 8" at the top; at least 12-1/2 gauge woven wire
- 12-1/2 gauge smooth or barbed wire with strands not more than 6" apart

Gates

- Must maintain 8' ft. height
- Two latching devices

Posts

- Wooden Corner Posts minimum 5" dia.
- Line Posts minimum 4" dia. Or metal T-posts weighing 1.25 pounds per foot
- Must extend 8' ft. above ground and 2' ft. below ground
- Spacing no more than 24' ft. apart
- H-braces or metal at all corners

Materials List

• T133 10'ft. T-Posts	\$10.99/post
• 5"-6" 10' Treated Wooden Posts	\$14.47/post
• 4"-5" 10' Treated Wooden Posts	\$10.06/post
• 12-1/2 gauge ¼ mile roll 2 point Barbed Wire	\$54.99/roll
• 12-1/2" gauge 6' Woven Wire- 300 ft. roll	\$590.00/roll
• 2" Barbed Fencing Staple	\$1.50/pound
• T-Post Clips	\$0.03/clip
• Misc. Nails & Hardware	\$1.50/pound
• 4' x 16' Commercial Grade Powder River Gates	\$260/gate
• 2" x 4" Fencing Stays	\$3.30/stay

Determine Fencing Materials needed per Mile (STRAIGHT LINE)

• 16 rolls of 12-1/2 gauge 2 point barbed wire=	\$879.84
• 18 rolls of 12-1/2 gauge 6' woven wire=	\$10,620.00
• 220 T133 metal 10' ft. T-posts=	\$2,417.80
• 3520 (16/T-post) T-post clips=	\$105.60
• 27 2" x 4" fencing stays=	\$89.10
• 5 H braces (one/1/4 mile)=	\$300.00
• 10 lbs. 2" barbed fencing staples/misc. nails=	\$15.00
• 4- 4' x 16' commercial grade powder river gates=	\$1,040.00
TOTAL ESTIMATED COST FOR MATERIALS PER MILE=	<u>\$15,467.34</u>
ESTIMATED COST FOR INSTALLATION PER MILE=	<u>\$10,000.00</u>
TOTAL	<u>\$25,467.34</u>

Table 4. Simple[§] estimate of the cost to include a parallel interior fence line to existing Type 1 cervid ranches as proposed in the staff's proposal to revise Division 049.

Licensee	Acreage	Mile ²	Perimeter (mi)	Simple Cost [‡]
John R. Kelly	0	0.000	0.0	\$0
Stanley G. Hermens	0	0.000	0.0	\$0
Allen & Kay Woosley	1	0.002	0.2	\$4,111
Oregon Zoo	1	0.002	0.2	\$4,111
Terry Kieling	2	0.003	0.2	\$5,814
Karl Johnson	4	0.006	0.3	\$8,222
Lewis & Judith Parent	5	0.008	0.4	\$9,192
Mark Rosenberg	6	0.009	0.4	\$10,070
William McCamman	9	0.014	0.5	\$12,333
West Coast Game Park, LLC.	10	0.016	0.5	\$13,000
Pardwood LLC.	15	0.023	0.6	\$15,922
Steve & Kathy Simpson	16	0.025	0.6	\$16,444
Sheldon & Carol Kirk	21	0.033	0.7	\$18,839
Lonnie & Louise Woosley	30	0.047	0.9	\$22,517
Alan & Brenda Ross	40	0.063	1.0	\$26,000
Jeffrey King	40	0.063	1.0	\$26,000
Wildlife Safari	60	0.094	1.2	\$31,843
Donald & Marina Kelly	100	0.156	1.6	\$41,110
Ochoco Valley Ranch, LLC.	100	0.156	1.6	\$41,110
Frank McCubbins	184	0.288	2.1	\$55,764
Richard Patterson	195	0.305	2.2	\$57,406
Mike & Cindy Kilpatrick	200	0.313	2.2	\$58,138
Lois Jordan	250	0.391	2.5	\$65,000
USDA Forest Service Research Station	800	1.250	4.5	\$116,276
Total				\$659,220

Notes:

[§] Calculation of "Simple" cost assumes square area with limited physical complications.

[‡] Calculation of cost based \$26,000/mile of fence and includes both materials and labor.

Table 5. Simple[§] estimate of the acreage lost by installing an interior fence to an existing Type 1 cervid farm as proposed in staff's proposal to revise Division 049.

Licensee	Acreage	Mile ²	Exterior Length one side (ft)	Interior Length one side (-20 ft)	Interior Acreage	% Lost Acres
John R. Kelly	0	0.000	0.0	0.0	0.0	0.0
Stanley G. Hermens	0	0.000	0.0	0.0	0.0	0.0
Allen & Kay Woosley	1	0.002	208.7	188.7	0.8	18.2
Oregon Zoo	1	0.002	208.7	188.7	0.8	18.2
Terry Kieling	2	0.003	295.2	275.2	1.7	13.1
Karl Johnson	4	0.006	417.4	397.4	3.6	9.4
Lewis & Judith Parent	5	0.008	466.7	446.7	4.6	8.4
Mark Rosenberg	6	0.009	511.2	491.2	5.5	7.7
William McCamman	9	0.014	626.1	606.1	8.4	6.3
West Coast Game Park, LLC.	10	0.016	660.0	640.0	9.4	6.0
Pardwood LLC.	15	0.023	808.3	788.3	14.3	4.9
Steve & Kathy Simpson	16	0.025	834.8	814.8	15.2	4.7
Sheldon & Carol Kirk	21	0.033	956.4	936.4	20.1	4.1
Lonnie & Louise Woosley	30	0.047	1143.2	1123.2	29.0	3.5
Alan & Brenda Ross	40	0.063	1320.0	1300.0	38.8	3.0
Jeffrey King	40	0.063	1320.0	1300.0	38.8	3.0
Wildlife Safari	60	0.094	1616.7	1596.7	58.5	2.5
Donald & Marina Kelly	100	0.156	2087.1	2067.1	98.1	1.9
Ochoco Valley Ranch, LLC.	100	0.156	2087.1	2067.1	98.1	1.9
Frank McCubbins	184	0.288	2831.1	2811.1	181.4	1.4
Richard Patterson	195	0.305	2914.5	2894.5	192.3	1.4
Mike & Cindy Kilpatrick	200	0.313	2951.6	2931.6	197.3	1.4
Lois Jordan	250	0.391	3300.0	3280.0	247.0	1.2
USDA Forest Service Research Station	800	1.250	5903.2	5883.2	794.6	0.7

Notes:

[§] Calculation of "Simple" cost assumes square area with limited physical complications.

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