Definitions

PROPOSAL 101

5 AAC 92.990(11). Definitions.

Change the definition for bows to include crossbows as follows:

I would like to see the definition for archery to include crossbows. The crossbow has a string and arms just like a regular compound bow or recurve bow. Yes it's more accurate but for people that cannot pull and hold a regular bow any longer they shouldn't be eliminated from a hunting opportunity and be able to use the crossbow.

What is the issue you would like the board to address and why? Change archery definition.

PROPOSAL 102

5 AAC 92.990. Definitions.

Establish a definition for "primitive weapons" to include crossbow, longbow, shotgun, and muzzleloader as follows:

Primitive weapons include: crossbow, longbow, shotgun, and muzzleloader. These are the four primitive weapons as described in the lower 48 states. Alaska is a state just as they are and we need to change our primitive weapons description to meet the same. It will be less confusing for people from the lower 48 when they come to Alaska to hunt in a special weapons hunt.

What is the issue you would like the board to address and why? Change definition of hunts from archery/muzzle loader to primitive weapons.

The Board of Game addressed the following proposal at the Interior and Eastern Arctic Region meeting in March 2020 (see Proposal 129). The board adopted the proposed dates to align the Controlled Use Areas and deferred the request for clarification of "hunting gear" to the 2021 Statewide Regulations meeting. The request to clarify the definition of "hunting gear" is the only portion of this proposal scheduled for the meeting.

PROPOSAL 103

5 AAC 92.990. Definitions.

Clarify whether hay and grain are considered as "hunting gear" as follows:

We would ask the board to clarify for Wildlife Troopers whether hay and grain to feed horses falls under the category of hunting "gear."

The following request was addressed by the Board of Game in March 2020 and will not be considered at the 2021 Statewide Regulations Meeting:

Align the Wood River CUA and Yanert Controlled Use Area closure dates. Amend 5AAC 92.540(H)(ii) to read:

the area is closed to the use of any motorized vehicle, except aircraft, for big game hunting, including the transportation of big game hunters, their hunting gear, or parts of big game, from Aug. 1 – Sept. 30; however, this provision does not prohibit motorized access, or transportation of game, on the Parks Highway, or the transportation into the area of game meat that has been processed for human consumption;

What is the issue you would like the board to address and why? Yanert Controlled Use Area – No defined closure dates to motorized access.

When the Yanert Controlled Use Area (CUA) was instituted, unlike the Wood River and other CUAs that mandate a specific time frame for closure for certain types of motorized access, there was no specific closure dates to the Yanert CUA.

While there may have been reasons originally for making the Yanert CUA closed year-round to motorized access other than aircraft for hunting purposes, we can see no reason now to keep the area closed year-round to ATVs and snowmachines in terms of transporting hunters and their hunting gear, or hay and grain to feed horses at hunting camps with the CUA.

There is currently one moose hunt offered in Unit 20A Yanert CUA by harvest ticket for both residents and nonresidents and the season runs September 1 – September 25. There is one caribou hunt by draw permit DC827 with a season from August 10 – September 20. And there is a general season sheep hunt August 10 – September 20.

So why exactly is the Yanert CUA closed year-round for ATVs and snowmachines for the transportation of hunters and their hunting gear? The Alaska Wildlife Troopers interpret the Yanert CUA to be closed to motorized access other than aircraft year-round for the purpose of hunting or transportation of hunting gear. Some troopers also take the position that hay and grain used to feed horses is hunting "gear" and some residents have been prevented from transporting hay and grain into camps within the Yanert during the winter months by snowmachine. This is causing logistical/economic issues for those with camps within the Yanert CUA who wish to travel to their camps during the winter months via snowmachine or ATV and may be transporting hunting "gear". We see no reason why anyone should not be allowed to transport hay and grain and tents and other hunting "gear" into the CUA during the winter months via snowmachine or ATV, and avoid the prohibitive cost of having to hire an air-taxi.

PROPOSED BY: Resident Hunters of Alaska	(EG-F19-133)
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PROPOSAL 104

5 AAC 92.990. Definitions.

Modify the definition of "deleterious exotic wildlife" with several housekeeping changes as follows:

(52) "deleterious exotic wildlife" means any starling (Sturnus spp.), [ENGLISH] house sparrow (Passer domesticus), or raccoon (Procyon lotor); any [NORWAY] brown rat (Rattus norvegicus), [ROCKDOVE] rock pigeon (Columba livia), or [BELGIAN HARE] European rabbit (Oryctolagus cuniculus) that is unconfined or unrestrained; and any feral ferret (Mustela putorious furo) or feral swine (Sus scrofa);

What is the issue you would like the board to address and why? The definition of "deleterious exotic wildlife" uses several archaic names that should be replaced by more common names. In some instances the archaic version limits the Board of Game's intent and renders regulations that rely on the definition less understandable and enforceable.

The house sparrow (*Passer domesticus*) was once better known in North America as the English sparrow. However, the same species was known in central Asia and India as the Indian sparrow. The American Ornithologists' Union (whose comprehensive checklist serve as the accepted authority for scientific nomenclature and English names of birds in the Americas) adopted the new common name in 1957.¹

Norway rat is another name for the brown rat (*Rattus norvegicus*). Like the "English" sparrow, deleterious exotic species were often named for their presumed country of origin. Thus, the English named the brown rat the "Norway" rat. However, "Norway" rats are now believed to have originated in central Asia and possibly China.² Unlike birds, there is no single authority on common names for mammals. The Museum of Texas Tech University, which publishes a checklist of North American mammals similar to that compiled by the American Ornithologists' Union, calls it the Norway or brown rat.³ The American Society of Mammologists (perhaps more comparable to the American Ornithologists' Union) calls it the brown rat.⁴ The International Union for Conservation of Nature calls it the brown rat.⁵

The rock dove (*Columba livia*) is commonly known simply as a pigeon, but there are many pigeon species worldwide. The American Ornithologists' Union renamed the rock dove the rock pigeon in 2003.⁶

The Belgian hare is a domesticated breed of the European rabbit that has been selectively bred to resemble a European hare. This has been a misnomer in the list of deleterious exotic wildlife from the day it was adopted by the board. No introduced species of hare are found in Alaska. All of the deleterious exotic lagomorphs in Alaska are European rabbits. Some of the rabbits released into the wild may have been Belgian hares but that is only one of many breeds of European rabbit. Most of the feral rabbits in Alaska – on Middleton Island and in several urban areas including Anchorage – do not resemble Belgian hares. Thus, using the term Belgian hare instead of European rabbit misinterprets the original intent of the board and makes enforcement impossible.

Finally, because common names differ and can be easily changed, it is advisable to use scientific nomenclature in regulations such as this to minimize ambiguity and confusion.

PROPOSAL 105

5 AAC 92.990. Definitions.

Add roof rat (*Rattus rattus*) and house mouse (*Mus musculus*) to the list of "deleterious exotic wildlife" as follows:

(52) "deleterious exotic wildlife" means any starling, English sparrow, or raccoon; any Norway rat, <u>roof rat (*Rattus rattus*)</u>, house mouse (*Mus musculus*), rockdove or Belgian hare that is unconfined or unrestrained; and any feral ferret or feral swine;

What is the issue you would like the board to address and why? The ADF&G Division of Wildlife Conservation wrote "Wildlife and People at Risk: A Plan to Keep Rats Out of Alaska" in 2007. The plan compiled a comprehensive list of international, federal, state and local agencies and entities that were expected to protect Alaska from invasive rodent species. The Board of Game was included; however, its role was not specified. In Table 3, under the categories of "Legal and Policy" and "Wildlife and Habitat Restoration" the Board's role was described in question marks.

¹ Avibase. 2019. House or Italian sparrow. https://avibase.bsc-eoc.org/species.jsp?lang=EN&avibaseid=6D3BD126D55F8B69&sec=taxontable&version=aou

² Wikipedia. 2019. Brown rat. https://en.wikipedia.org/wiki/Brown_rat#cite_note-8

³ R.D. Bradley, L.K. Ammerman, R.J. Baker, L.C. Bradley, J.A. Cook, R.C. Dowler, C. Jones, D.J. Schmidly, F.B. Stangl, Jr., R.A. Van Den Bussche, and B. Würsig. 2014. Revised checklist of North American mammals north of Mexico, 2014. Occasional Paper No. 327. Natural Science Research Laboratory, Texas Tech University, Lubbock. https://archive.org/details/revisedchecklis327brad/mode/2up

⁴ American Society of Mammologists. 2019. Mammal species list search. https://www.mammalogy.org/mammals-list

⁵ International Union for Conservation of Nature (IUCN). 2019. Brown rat: *Rattus norvegicus*. https://www.iucnredlist.org/species/19353/22441833#taxonomy

⁶ Banks, R.C., C. Cicero, J.L. Dunn, A.W. Kratter, P.C. Rasmussen, J.V. Remsen, Jr., J.D. Rising, and D.F. Stotz. 2003. Forty-fourth supplement to the American Ornithologists' Union *Check-list of North American Birds*. The Auk 120:923-931. https://www.biodiversitylibrary.org/content/part/AOU/AOU checklist suppl 44.pdf

⁷ Wikipedia. 2019. Belgian hare. https://en.wikipedia.org/wiki/Belgian_Hare

But the board has the legal authority to identify an invasive species as "deleterious exotic wildlife" and has done so for several species.

Both roof rats and house mice have become established in Alaska, although neither species is as widespread or destructive to human property or wildlife as brown (Norway) rats. Nevertheless, all three species – brown and roof rats and house mice – are considered species of concern by the plan,1 and roof rats and house mice are considered two of the world's 100 worst invasive species by the IUCN's Invasive Species Specialist Group.² Adding the two species to the state's list of "deleterious exotic wildlife" is a necessary step to fulfill the board's role in protecting Alaska from invasive rodent species.

¹ Fritts, E. 2007. Wildlife and people at risk: a plan to keep rats out of Alaska. Division of Wildlife Conservation, Alaska Department of Fish and Game, Juneau. https://www.adfg.alaska.gov/static/species/nonnative/invasive/pdfs/invasive_rodent_plan.pdf

PROPOSED BY: Rick Sinnott (EG-F20-031)

PROPOSAL106

5 AAC 92.990. Definitions.

Provide a definition for "feral" as follows:

"feral" means an ownerless and unconfined domestic animal, or the progeny of an ownerless and unconfined domestic animal, that no longer depends solely on food provided by humans to survive.

What is the issue you would like the board to address and why? "Feral" is used in several regulations adopted by the Board of Game, including [emphasis added in text]:

- 5 AAC 92.990(a)(73) "nuisance wildlife" includes
- (A) a **feral** domestic bird or mammal, deleterious exotic wildlife, unclassified game, small game, fur animals or furbearers, except wolf, wolverine, or lynx, or migratory bird for which there is a federal depredation order for this state under issued 50 CFR Sec. 21.43;
- (B) an animal that invades a dwelling, cause property damage, or is an immediate threat to health, safety, or property;

...

² Lowe, S., M. Browne, S. Boudjelas, and M. De Poorter. 2000. 100 of the world's worst invasive alien species. Invasive Species Specialist Group, International Union for Conservation of Nature (IUCN). http://www.issg.org/pdf/publications/worst 100/english 100 worst.pdf

5 AAC 92.990(a)(52) "deleterious exotic wildlife" means any starling, English sparrow, or raccoon; any Muridae rodent, rockdove or Belgian hare that is unconfined or unconstrained; and any **feral** ferret or **feral** swine.

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- 5 AAC 92.029 Permit for possessing live game (d) Under this section, and in accordance with the definition of "game" in AS 16.05.940 (which includes **feral** domestic animals), a
- (1) game animal defined as deleterious exotic wildlife or a nonindigenous gallinaceous bird is **feral** if the animal is not under direct control of an owner, including being confined in a cage or other physical structure, or being restrained on a leash; the commissioner may capture, destroy, or dispose of any **feral** deleterious exotic wildlife or **feral** nonindigenous gallinaceous bird in an appropriate manner.

Other than the definition of "feral" used for nonindigenous gallinaceous birds in 5 AAC 92.029(1), the term is not defined in regulation. Applying that definition ("not under direct control of an owner") to other domestic animals is problematic because it could, for example, include a racing pigeon, unleashed family dog, or a horse that gets out of its enclosure.

At the other extreme, conventional wisdom and most dictionary definitions of "feral" seem to consider an animal to be feral only when it reverts to a wild state. But there is a spectrum of behavior that might be considered wild. A domestic animal that has gone feral is one that can and has survived in the wild on its own, at least for an extended period. It doesn't necessarily have to become so wild that it avoids all human contact, the definition used by Anchorage Animal Control. Even wild animals seek out human contact and foods in some situations, and one reason why feral animals (like cats) cause problems is that they are capable of killing wildlife and spreading diseases while being subsidized by food and shelter provided by people.

It is also unclear what "feral domestic" means. Certainly, the offspring of an animal that was once domestic are also feral.

The definition I have proposed would provide a clear definition of "feral" and ensure that all formerly domestic animals, and their offspring, that no longer depend solely on food provided by humans to survive will fall under the definition of "nuisance wildlife."

PROPOSED BY:	Rick Sinnott	(EG-F20-034)
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PROPOSAL 107

5 AAC 92.990. Definitions.

Add unconfined and unrestrained domestic cats to the definition of "deleterious exotic wildlife" as follows:

(52) "deleterious exotic wildlife" means any starling, English sparrow, or raccoon; any **domestic cat** (**Felis catus**). Norway rat, rockdove or Belgian hare that is unconfined or unrestrained; and any feral ferret or feral swine;

What is the issue you would like the board to address and why? None of the invasive species that the Board of Game (board) has previously identified as "deleterious exotic wildlife" are as deleterious as the unconfined or unrestrained domestic cat. Cats now outnumber dogs in North America, with the number of pet cats tripling in the past 40 years. U.S. households own an estimated 94 million cats, while the best estimates of abandoned, stray and feral (aka free-ranging) cats range from 70-100 million. Cats are now the most abundant terrestrial carnivore in North America.

In the most comprehensive meta-analysis of cat predation conducted to date, free-ranging and pet cats were estimated to kill 1.3 to 4 billion wild birds and 6.3 to 22.3 billion mammals annually in the contiguous United States. A similar analysis estimated that cats kill 100-300 million wild birds annually in Canada, which has a much lower population of cats. Using the same predation rates as the national study, an estimated 30,000 free-ranging and 74,600 pet cats are estimated to kill 1,148,000 birds and 5,975,000 mammals annually in the Municipality of Anchorage alone.

These estimates are driven primarily by the high number of cats. The average pet cat probably kills less than a bird a month, but it adds up. Most of these prey items are native species, not deleterious exotics like house mice, rats or house sparrows. Cats kill more wild birds annually than windows, communication towers, vehicles, and pesticides combined.¹

Cats are the sacred cows of America. Unlike dogs, in most jurisdictions pet cats don't require licenses, leashes or constraints. The public (and most animal control agencies) seem to accept free-ranging cats, but not free-ranging dogs. For example, Alaska state law allows a person to shoot a dog that is harassing wildlife (under certain conditions), but not a cat.

Adding insult to injury, the board has classified some species of feral pets (including ferrets, European rabbits [erroneously listed as "Belgian hares"], pigeons, rats and mice) and other feral domestic animals (such as feral swine) as "deleterious exotic wildlife" or invasive species, but not feral cats.

Feral cats are considered to be one of the world's 100 worst invasive species by the International Union for Conservation of Nature,⁴ one of the 50 top invasive species in western states by the Western Governor's Association (of which Alaska is a member state),⁵ and a species with high invasive potential in Alaska by the University of Alaska's Alaska Natural Heritage Program.⁶

Starlings, house ("English") sparrows, rock ("doves") pigeons, European rabbits ("Belgian hares") and feral swine are included in the definition of deleterious exotic wildlife primarily because they compete with native species for food and other resources such as nest sites. They can also spread diseases to native species. Brown ("Norway") rats, raccoons, and ferrets are included because they kill wildlife. But none of these species (with the possible exception of rats on Aleutian islands) compete with, kill, or spread diseases to Alaska's wildlife to the extent that cats do.

Domestic species may not be released into the wild in Alaska (5 AAC 92.029). However, unlike most other domestic species, there seems to be little concern for free-ranging cats. Many owners don't even try to confine them. Because they are far more regulated, dogs are seldom as problematic as cats.

A good example of the unquestioned, unique status of cats is the inclusion of ferrets as deleterious exotic wildlife in Alaska. Ferrets – because they are weasels domesticated as a hunting aid – are thought by some to pose a threat to wildlife if released into the wild. Two states, Hawaii and California, still prohibit owning ferrets as pets. Nevertheless, a summary of issues and options prepared for California noted that ferrets were less likely to be predators than prey, and would not survive more than about three days in the wild according to one source, although he stretched that estimate to a few weeks just to be safe. Despite their fierce reputation, ferrets do not seem to pose a significant problem to native wildlife. A survey of multiple state and county officials from a wide array of natural and agricultural agencies found less than one sighting of a feral ferret per year, with no discernable impact on wildlife noted. And yet cats, which kill billions of wild birds and mammals in North America (and millions in Alaska) annually, are not on the state's list.

A similar comparison can be made with rats. An analysis of the cost of alien and invasive species in the U.S. conducted in 2005, when cat populations were approximately two-thirds as high as current estimates, calculated the annual value of wild birds killed by feral cats (i.e., not including those killed by pet cats) to be approximately \$17 billion, only slightly less than the economic cost of rats. The analysis didn't subtract the value of small mammals, amphibians and reptiles killed by cats. Nor did it factor in the human health impacts of toxoplasmosis and other cat-related diseases. The same analysis concluded that the economic cost of feral and pet dogs was \$620 million annually, including treatment of dog bites and human fatalities. When a careful, objective assessment concludes that cats pose a greater environmental threat than rats, you know we have a serious problem. Why aren't cats on the state's list of deleterious exotic wildlife?

The Board of Game appears to have a low threshold for "feral." Swine, ferrets and non-indigenous gallinaceous birds (e.g., turkeys, chickens, pheasants) are considered feral "if the animal is not under direct control of the owner, including being confined in a cage or other physical structure, or being restrained on a leash" (5 AAC 92.029[d][1]). However, somewhat surprisingly, the much more abundant and problematic free-ranging domestic cats are not included on the state's list of feral animals.

I considered adding only "feral cats" to the definition. Individual feral cats tend to kill more wild birds and mammals than stray or pet cats. However, almost all unconfined and unrestrained cats kill wild birds and mammals. The problem isn't limited to feral cats; the problem is the growing number of cats, irresponsible owners, and the propensity of cats to hunt and kill even when they

are well fed. It is also extremely difficult for an enforcement officer to differentiate between a feral, stray, abandoned or any other free-ranging cat because many pet cats don't wear collars or tags. Not including all unconfined and unrestrained cats on the state's list of deleterious exotic wildlife makes a mockery of that list.

In a previous Board of Game meeting, some members expressed a concern that adding cats to the list of deleterious exotic wildlife would result in promiscuous shooting of pet cats. However, having a law on the books that allows any person to shoot a dog that is harassing big game doesn't seem to have resulted in a lot of pet dogs being shot by neighbors. Most people won't shoot a feral cat, but the risk of penalties or losing one's pet cat should instill a sense of responsibility in cat owners, as it does in dog owners.

PROPOSED BY: Rick Sinnott	(EG-F20-032)
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¹ Loss, S.R., T. Will, and P.P. Marra. 2013. The impact of free-ranging domestic cats on wildlife in the United States. Nature Communications 4. http://www.nature.com/articles/ncomms2380

² Blancher, P. 2013. Estimated number of birds killed by house cats (*Felis catus*) in Canada. Avian Conservation and Ecology 8:3. http://www.ace-eco.org/vol8/iss2/art3/

³ Sinnott, R. 2019. Animal control in Anchorage, Alaska: cats and dogs deserve equal treatment. Prepared for the Anchorage Animal Control Advisory Board and Anchorage Watershed and Natural Resources Advisory Commission, Anchorage, Alaska. 110 pp. https://www.muni.org/Departments/OCPD/Planning/SiteAssets/Pages/WNRCReso-MinutesArchive/WNRC%20ltr%20to%20Animal%20Control%20Board%20w%20Report-12-20-2019%20rev.pdf

⁴ Lowe, S., M. Browne, S. Boudjelas, and M. De Poorter. 2000. 100 of the world's worst invasive alien species. Invasive Species Specialist Group, International Union for Conservation of Nature (IUCN). http://www.issg.org/pdf/publications/worst_100/english_100_worst.pdf

⁵ Western Governors' Association. 2018. Top 50 invasive species in the West. http://westgov.org/images/editor/WGA Top 50 Invasive Species.pdf

⁶ McClory, J., and T. Gotthardt. 2008. Non-native and invasive animals of Alaska: a comprehensive list and select species status reports. Final report. Alaska Natural Heritage Program, University of Alaska Anchorage, Anchorage, Alaska. 64 pp. http://www.adfg.alaska.gov/static/species/nonnative/invasive/pdfs/invasivespp_report.pdf

⁷ Umbach, , K.W. 1997. Ferrets: a selective overview of issues and options. CRB Note 4(3):9 pp. California Research Bureau, California State Library. http://www.legalizeferrets.org/wp-content/uploads/2016/03/CA-Research-Library-Article.pdf

⁸ Lepe, A., V. Kaplan, A. Arreaza, R. Szpanderfer, D. Bristol, and M.S. Sinclair. 2017. Environmental impact and relative invasiveness of free-roaming domestic carnivores – A North American survey of governmental agencies. Animals 7(10), 78. http://www.mdpi.com/2076-2615/7/10/78/htm

⁹ Pimentel, D., R. Zuniga, and D. Morrison. 2005. Update on the environmental and economic costs associated with alien-invasive species in the United States. Ecological Economics 52:273-288. https://www.forest-trends.org/wp-content/uploads/imported/pimentel-et-al-2005-update-on-envir-econ-costs-of-invasives-pdf.pdf