

Exhibit 1

Enclosure and Caging Standards for Holding Wildlife

All facilities for held wildlife must be designed, constructed and maintained to provide:

1. Protection for free-ranging wildlife.
2. Holding facilities and outdoor cages and enclosures must be locked or secured to prevent escape.
3. Holding facilities must ensure containment for wildlife being held and exclusion of other wild and domestic animals.

Mammals**Bear (*Ursus americanus*) and Cougar (*Puma concolor*)**

Minimum Specifications for Existing Holding Facility for Bear (*Ursus americanus*) and Cougar (*Felis concolor*)

Minimum enclosure size:

Enclosure must be at least 6 feet in height with a minimum floor area of three hundred (300) square feet for each **adult** animal **older than 6 months of age** [shall be]. [excluding] Cubs or kittens under six (6) months of age **may be held with their mother with no additional space requirements**.

Construction:

Floor: The floor shall be constructed in one of the following ways:

For Bear:

- Four (4) inch reinforced concrete, sloped for free drainage.

For Cougar:

- Four (4) inch reinforced concrete, sloped for free drainage; or
- Four (4) inch reinforced continuous concrete skirt four (4) feet wide around either inside or outside of pen perimeter; or
- Six (6) inch concrete curb two (2) feet deep around pen perimeter. If the substrate will not permit subsurface construction, 9 gauge chain link fencing or its equivalent shall be buried and extend three (3) feet inside. This subsurface wire shall be securely anchored; or
- (Only for declawed cougar. Owner must provide veterinarian proof of declawing upon request.) Natural earth with a minimum of three (3) inches

concrete skirt two (2) feet wide around either inside or outside of pen perimeter.

Gate: Double gate construction consisting of welded, bolted or threaded frames. The exterior gate must be secured by a lock at all times except when entry is required. One gate must open inward and have a positive stop to prevent opening when unlocked and pressured by the caged animal. The gate must be constructed in a manner to provide strength comparable to the rest of the cage, and the hinges and fasteners must be adequate to provide strength equivalent to the rest of the construction.

Cage: The cage shall be constructed in one of the following ways:

- Frame and mesh construction, to consist of a supportive framework, corner and gate posts to be steel pipes or beams equivalent in strength to 2-inch steel pipe, top and sides, of steel pipes or beams equivalent in strength to 1-1/2 inch steel pipe, securely welded, bolted, or threaded together, with framework members at intervals no greater than five (5) feet; gate posts, steel pipe and beam posts must be embedded in concrete to a minimum depth of two (2) feet, wire mesh covering of 9 gauge chain link fencing or its equivalent, securely bolted, welded or attached with 9 gauge fence ties to framework. Top to be constructed of 9 gauge chain link fencing or equivalent for bear, 11-1/2 gauge chain link fencing or equivalent for cougar, attached in a similar manner as sides.
- Barred construction, to consist of steel pipes or bars equivalent in strength to 3/4 inch steel pipe, spaced at intervals not to exceed six (6) inches, and supported at intervals not to exceed thirty-six (36) inches with 3/8 by 2 inch steel bars drilled to receive the vertical bars at the intervals given above; all joints or points of meeting to be securely bolted or welded, top and sides. Top to be bar construction as described above or constructed of 9 gauge chain link fencing or equivalent for bear, 11-1/2 gauge chain link fencing or equivalent for cougar, securely attached to sides.

Other Specifications

A water trough of not less than four (4) U.S. gallons securely attached inside of the cage.

One den box for each animal kept, to be constructed on a floor level not less than three and one half (3-1/2) inches above the floor level of the main cage; providing fifteen (15) square feet of floor area per animal; being not less than thirty (30) inches high inside; with floor sloped to provide free drainage.

Shelter to protect animal from sun and rain must be provided.

Exercise or open top enclosure may not replace the minimum cage requirements for this Exhibit 1. However, if such a facility is provided, it must comply with the following minimum requirements:

Perimeter fence construction must be 9 gauge chain link type fencing or equivalent a minimum of eight (8) feet high with a double overhanging cantilever of electrified wire. Each cantilever to be not less than 18 inches in length, totally surrounding the entire enclosure and one to slope in, the other to slope out, both at a 45-degree angle, containing electrified wires not less than 16 gauge, equally spaced, not to exceed six (6) inch spacing intervals. A "New Zealand" style energizer that is appropriately sized for the amount of wire to be energized shall power the fence.

Frame and mesh construction, to consist of a supportive framework, all posts to be steel pipes or beams equivalent in strength to 1-1/2 inch steel pipe, with vertical frame members at intervals no greater than ten (10) feet. Vertical frame members must be imbedded in concrete to a depth of three (3) feet. Horizontal frame members are required at top and bottom of vertical portion of fence. Nine gauge chain link fence or equivalent securely attached to top and bottom horizontal frame members at intervals not to exceed one (1) foot.

Double gate construction to be welded, bolted or threaded frames. The exterior door must be secured by a lock at all times except when entry is required. One gate must open inward and have a positive stop to prevent opening when unlocked and pressured by the caged animal. The gate must be constructed in a manner to provide strength comparable to the rest of the cage, and the hinges and fasteners will be adequate to provide strength equivalent to the rest of the construction.

Animals may occupy the exercise enclosure only when keeper is present.

A person holding wildlife and seeking equivalency approval shall submit to the department a detailed analysis of each specification required and certification by an individual possessing a valid Professional Engineering License indicating the facility provides equivalent structural integrity and design.

Bears and cougars acquired by transfer or new holding application, and following adoption of the revised rules (March 18, 2016), shall only be held at Oregon AZA accredited facilities or as approved by the Director.

Wolf (*Canis lupus*)

Consideration should be built into the enclosure design to address wolf physical, social, behavioral and psychological requirements. Wolves should be provided with large,

complex outdoor spaces with enclosure shape, topography, substrate, and vegetation placement considered in the enclosure design. A large and diverse enclosure will provide the opportunity for more natural, species-appropriate behaviors.

Enclosures should be built on a relatively flat area to facilitate walking and running and contain diverse features including topographical enhancements and natural features that may include deadfall, logs, or boulders, and planted with trees and shrubs to provide shelter, shade, and escape from conspecifics. Natural or artificial shelters should be provided to allow animals privacy and escape from inclement weather or insects. Wolves should be housed on natural substrates such as grass, dirt, sand, or forest litter. Enclosures should contain sufficient visual barriers to provide opportunity to avoid staff and conspecifics when desired.

Enclosures should be constructed in an area that drains well to prevent the collection of water, especially in the vicinity of resting and den areas.

- The primary enclosure for the holding of wolves should be at least 465 m² (5,000 ft²) for a same sex group of 2 animals or non-reproductive pair.
- Add 93 m² (1,000 ft²) for each addition member of a compatible same sex or non-reproductive grouping.
- Holding and handling areas should include 2 holding/shift pens a minimum of 19 m² (200 ft²) in area each

The shape of enclosures should be considered to maximize area of spatial movement of individual animals. For example a 465 m² (5,000 ft²) enclosure with a square or round dimension of 20 m x 23 m (70 ft x 72 ft) is better than a narrow rectangular area approximating 3 m x 155 m (10 ft x 500 ft) enclosure. Enclosure fence design should avoid tight corners (<90°) which provide an opportunity for wolves to climb or trap subordinates in these areas. A circular perimeter pen design may reduce stereotypic pacing.

All areas within the enclosure should be secure including shift doors, gates and access doors, locking mechanisms. The wolf enclosure should have a dig barrier, a perimeter wall or a moat, and a climbing barrier if walls can be climbed. A double-door access system leading to all areas containing wolves and a secondary perimeter fence is strongly recommended to surround all holdings of wolves.

The enclosure perimeter must have an underground dig barrier to prevent wolf escape. To prevent digging at the perimeter barrier, a 90 cm (3 ft) wide section of chain-link fencing is recommended to extend inside the barrier from the bottom edge of the vertical fence. This digging barrier should come to the fence at approximately 90° to the vertical fence, and should be buried 15-30 cm (6-12 in) below ground level. A concrete footing 15-20 cm (6-8 in) wide and 90-120 cm (3-4 in) deep should be poured

at all gates to prevent digging at these areas, and any other areas where a digging barrier cannot be installed.

The vertical height of a mesh fence wall must be at least 2.5 m (8.2 ft). An additional 1 m (39 in) overhanging climb barrier is recommended. The climb barrier should extend into the enclosure at a 35-45° upward angle. Mesh fencing should be made of metal wire that is 9 gauge or larger in wire size. Maintenance checks and fence and perimeter inspections should be conducted daily.

Mesh fencing used as a common containment barrier between conspecifics should have an opening size of ≤ 2.5 cm x 2.5 cm or 1 in x 1 in to prevent from having body parts (e.g., paw, tail, etc.) enter through the containment barrier into the adjacent enclosure.

Solid walls 3.5 m (11.5 ft) tall are sufficient to contain gray wolves. Solid walls that are less than this height should have a climbing barrier installed.

Transparent barriers, such as glass, Plexiglas, and Lexan can also be used holding areas of the enclosure.

Small holding or shift pens should have a dirt floor and be <46.5 m² (500 ft²) in size with galvanized chain-link mesh buried under the entire pen as an anti-dig barrier.

Doors used in wolf enclosures can be solid or wire mesh. Slide doors or guillotine gates that animal caretakers can operate without entering the exhibit are recommended for safety and wolf movement management. Gates should have an opening of at least 91 cm (36 in) high and 61 cm (24 in) wide, and be securable and lockable in the closed position. Swing gates can also be used for animal movement between areas. For the safety of the animals and staff, gaps between doors and the containment walls should be less than 5 cm (2 in). Animal caretakers entering a wolf enclosure should pass through two levels of containment (e.g., primary and secondary).

Gray wolf holding facilities should be contained within a secondary perimeter fence. This fence should be 2.5 m (8 ft) high with gates that can be closed if an animal escapes its enclosure.

(Adapted from the AZA Large Canid (Canidae) Care Manual; AZA Canid Taxon Advisory Group and AZA Animal Welfare Committee. 2012.)

Wolves acquired by transfer or new holding application, and following adoption of the revised rules (March 18, 2016), shall only be held at Oregon AZA accredited facilities or as approved by the Director.

Bobcat (*Lynx rufus*) or Raccoon (*Procyon lotor*)

- Single animal - 8 feet by 6 feet (48 square feet) of floor area and 6 feet in height.
- Add a minimum of 24 square feet of floor space for each additional animal.
- All caging and substrates should be escape-proof (i.e.-flooring should be made of a hard surface or have a subsoil barrier. Enclosures with scalable walls must be completely contained and enclosed to prevent escape.
- Clawing logs and a 2 square foot den box required for each animal.
- A climbing tree with three or more four-inch diameter branches shall be available for each raccoon or bobcat.
- A 500 square inch protected shelf area shall be provided for each animal. Platforms shall be at least 3 feet above the floor.

Bobcats and raccoons acquired by transfer or new holding application, and following adoption of the revised rules (March 18, 2016), shall only be held at Oregon AZA accredited facilities or as approved by the Director.

Small Mammals, Amphibians, and Reptiles

Squirrels

Northern flying squirrel (*Glaucomys sabrinus*)
Chipmunk (*Tamias amoenus*, *T. minimus*, *T. senex*, *T. siskiyou* and *T. townsendii*)
Douglas's squirrel (*Tamiasciurus douglasii*)
Red squirrel (*Tamiasciurus hudsonicus*)
Golden-mantled ground squirrel (*Spermophilus lateralis*)
California Ground Squirrel (*Spermophilus beecheyi*)
Belding's Ground Squirrel (*Spermophilus beldingi*)

- Single animal enclosure requires at least 16 square feet in floor area and 8 feet in height for arboreal species and 4 feet in height for ground squirrels. All caging will require a mesh or solid roof to prevent escape.
- Outdoor caging should be made of metal mesh material such as hardware cloth to prevent escape. The mesh size of hardwire cloth material should not exceed 1"x 1/2".
- Increase cage size by one foot in width and depth for each additional animal held.
- One nest box, 1 square foot and 2 feet high, elevated 5 feet off the ground, shall be provided for each animal.

- A central climbing tree with at least three, three-inch branches shall be available for arboreal species.
- Ground Squirrel species require appropriate soil substrate for digging. A permanent wire mesh barrier is required across the cage floor, connected to the walls and buried beneath at least 18 inches of substrate such as soil or sand.
- Environmental enrichment should be incorporated into enclosure design including enrichment toys and hiding and climbing structures.

Brush Rabbit (*Sylvilagus bachmani*)

- Cage size for a single animal will be a minimum of 18 square feet and 3 feet in height using 14 gauge wire. Add 1 foot in cage length. Flooring should be constructed of solid surfacing or ½ square inch wire mesh size.
- Within the enclosure, a den or hutch area is required and should be 9 square feet and 2 feet in height.
- A natural substrate (hay) or other appropriate material (pelleted paper) should cover the enclosure floors including suitable nesting material for the nest boxes.
- Gnawing logs are required.

North American Porcupine (*Erethizon dorsatum*):

- One animal requires an enclosure floor area measuring at least 25 square feet and 8 feet in height. For each additional animal, increase enclosure size by at least 20 percent of original floor area.
- Enclosures should be completely enclosed by a solid (i.e. glass) or wire mesh barrier of 14 gauge or greater wire. An open topped exhibit may be used provided the surrounding walls are at least 4 feet high and are composed of a smooth surface to prevent climbing. Solid or wire barrier flooring beneath the exhibit is required to prevent escape. A 3 foot return buried 12 – 24 inches down under an outdoor enclosure will prevent animals from digging under the barrier.
- A natural substrate (hay, straw) or other appropriate material (pelleted paper) should cover indoor enclosure floors including suitable nesting material for the nest boxes. Substrate in an outdoor exhibit may be a natural material such as soil, wood chips or pine needles.
- Environmental enrichment including rock piles and concrete culverts and logs, branches for gnawing, perching, climbing and hiding should be included.
- Shelters must be made available for all animals held in outdoor enclosures.

For more information on porcupine husbandry standards refer to:

<http://www.glenoakzoo.org/RodentTAG/rodentPDFs/Porcupine%20standards.pdf>

Voles and Moles

Long-Tailed Vole (*Microtus longicaudus*)

Montane Vole (*Microtus montanus*)

Coast Mole (*Scapanus Orarius*)

[Moles do not thrive in captive situations due to their complex habitat needs. It is not recommended to remove moles from the wild.]

Minimum enclosure size:

- One adult or 1 litter per 10 gallon container or made of ½ inch wire mesh at least 18 inches by 6 inches (108 square inches) and at least 6 inches in height.
- Outdoor caging should be made of metal mesh material such as hardware cloth to prevent escape. Dirt or sand floors should have hardware cloth or plywood buried along the interior sides of the cage, approximately 12" below the surface to prevent escape. A permanent wire mesh barrier is required across the cage floor, connected to the walls and buried beneath an appropriate substrate such as soil or sand. A natural substrate or other appropriate material should cover indoor enclosure floors including suitable nesting material for the nest boxes.
- All caging will require a mesh or solid roof to prevent escape.
- Voles (omnivores but consume primarily plant material including roots) and moles (grubs and earthworms) require very specific diets and must be fed appropriately. Voles can consume their own weight in plants per day.
- Provide appropriate nesting material and environmental enrichment such as hiding logs.

Mustelids

Ermine (*Mustela erminea*)

Long-Tailed Weasel (*Mustela frenata*)

Skunk (*Mephitis* spp.)

- Enclosures require a 32 square foot area per animal with an enclosure at least 4 feet in height with a 2 square foot denning box.
- Increase cage floor area by 25% for each additional animal.
- All caging will require a mesh or solid roof to prevent escape.
- Skunks require appropriate soil substrate for digging. A permanent wire mesh barrier is required across the cage floor, connected to the walls and buried beneath at least 18 inches of substrate such as soil or sand. Weasels make nests of grass, cornhusks, etc. which may be lined with fur and benefit from soft substrates that allow for burrowing.
- Environmental enrichment should be incorporated into enclosure design including enrichment toys and hiding and climbing structures.

**Bushy-Tailed Woodrat (*Neotoma cinerea*)
Deer Mouse (*Peromyscus maniculatus*)**

- Woodrats require wire mesh enclosures at least 25 square feet and 2 feet high with a nest box (9 inches square) for 1-2 animals. Increase cage floor area by 25% for each additional animal.
- Mice require wire mesh enclosures of 2 square feet (288 square inches) a foot high for up to 3 mice. Mesh should be a quarter inch or less between the wires to prevent escape. Increase enclosure area 50% with the addition of every 3 mice.
- A natural substrate or other appropriate material should cover indoor enclosure floors including suitable nesting material for the nest boxes.
- Enclosure should be made of a material that is easy to clean and deodorize and is indestructible to rodent chewing or digging in the corners. Aquariums are not suitable cages for rats and mice because of inadequate air circulation and subsequent ammonia buildup.
- Temperature range for mice is approximately 65-75 degrees Fahrenheit. Wild mice are nocturnal – avoid direct or bright light.
- Environmental enrichment should be incorporated into enclosure design including enrichment toys and hiding and climbing structures with ramps and solid platforms.

Amphibians

**Northwestern Salamander (*Ambystoma gracile*)
Long-toed Salamander (*Ambystoma macrodactylum*)
Rough-Skinned Newt (*Taricha granulosa*)
Coastal Giant Salamander (*Dicamptodon tenebrosus*)
Ensatina (*Ensatina eschscholtzii*)
Western Red-Backed Salamander (*Plethodon vehiculum*)
Pacific Treefrog or Pacific Chorus Frog (*Pseudacris regilla*)
Great Basin Spadefoot (*Spea intermontana*)**

The following are considered the minimum requirements necessary to maintain the listed amphibians in humane conditions. ODFW strongly encourages individuals to become familiar with the life history needs of animals in their care and provide caging and holding conditions that exceed the minimum requirements.

- Eggs must be held in a container at least 1 gallon in volume with an open top to provide aeration. Maximum number of eggs per container:

1 egg mass for Northwestern Salamander (*Ambystoma gracile*), Long-toed Salamander (*Ambystoma macrodactylum*), Pacific Treefrog or Pacific Chorus Frog (*Pseudacris regilla*) and;

2 egg masses for Great Basin Spadefoot (*Spea intermontana*)

Up to 20 eggs for Rough-Skinned Newt (*Taricha granulosa*) and Coastal Giant Salamander (*Dicamptodon tenebrosus*)

- Provide unchlorinated or de-chlorinated water and change 50% daily to maintain sanitary conditions and PH.
- Provide ambient light and partial shade.
- Larvae or tadpoles from each egg container should be transferred to a 5 gallon container with a lid that provides ventilation and prevents escape. Coastal Giant Salamander (*Dicamptodon tenebrosus*) larvae require a 10 gallon container/ 20 larvae
- Provide unchlorinated or de-chlorinated water and change 50% daily to maintain sanitary conditions and PH.
- Provide ambient light and partial shade.
- Provide suitable live food daily.
- Remove dead tadpoles or larvae immediately following discovery.
- Provide suitable substrate above the water surface for newly metamorphosed individuals to climb onto.

Metamorphosed juveniles and adults

- Minimum caging requirements for a single salamander, or frog include a glass or plastic aquarium with a floor area equal to 2 square feet (288 square inches), and a lid that provides ventilation and prevents escape. Increase the floor area by 25% for each additional animal.
- For semi-aquatic salamanders and frogs, (Northwestern Salamander (*Ambystoma gracile*), Long-toed Salamander (*Ambystoma macrodactylum*), Rough-Skinned Newt (*Taricha granulosa*), Coastal Giant Salamander (*Dicamptodon tenebrosus*) Pacific Treefrog or Pacific Chorus Frog (*Pseudacris regilla*), provide suitable clean non-toxic substrate over half the aquarium floor and unchlorinated or de-chlorinated water a minimum of 3 ½ inches deep in the other half.
- For terrestrial salamanders and frogs (*Ensatina* (*Ensatina eschscholtzii*), Western Red-Backed Salamander (*Plethodon vehiculum*), and Great Basin Spadefoot (*Spea intermontana*), provide suitable clean non-toxic substrate over the aquarium floor

and access to a shallow dish containing unchlorinated or de-chlorinated water should be provided at all times.

- Great Basin Spadefoot require clean suitable non-toxic substrate over the aquarium floor, deep enough to allow the animal to burrow and completely cover itself.
- Aquaria surfaces, water and substrates should be cleaned or changed as needed to maintain sanitary conditions.
- Appropriate food sources should be offered every 2-3 days.
- Temperatures should not be allowed to drop below 35 or above 78 degrees Fahrenheit for more than a few days.
- All interior surfaces should be lightly misted a minimum of once a day to provide humidity.
- Provide ambient light and partial shade.
- Provide hiding habitat to minimize stress.

Reptiles

The following are considered the minimum requirements necessary to maintain the listed reptiles in humane conditions. ODFW strongly encourages individuals to become familiar with the life history needs of animals in their care and provide caging and holding conditions that exceed the minimum requirements.

Great Basin Whiptail (*Aspidoscelis tigris tigris*)
Northern Alligator Lizard (*Elgaria coerulea*)
Southern Alligator Lizard (*Elgaria multicarinata*)
Western Skink (*Plestiodon skiltonianus*)
Northern Sagebrush Lizard (*Sceloporus graciosus graciosus*)
Western Fence Lizard (*Sceloporus occidentalis*)
Common Side-Blotched Lizard (*Uta stansburiana*)

- Minimum caging requirements for a single lizards include a glass or plastic aquarium with a floor area equal to 2.5 square feet (360 square inches), and a lid that provides ventilation and prevents escape. Increase the floor area by 25% for each additional animal.
- Provide suitable clean substrate over the aquarium floor.
- Provide continuous access to a shallow dish containing unchlorinated or de-chlorinated water.

- Aquaria surfaces, water and substrates should be cleaned or changed as needed to maintain sanitary conditions.
- Appropriate food sources should be offered every 2-3 days.
- Suitable diurnal and nocturnal temperature gradients should be maintained within the cage.
- Provide full spectrum light and a heat lamp during daylight hours.
- Provide climbing opportunities.
- Provide hiding habitat to minimize stress.

Western Rattlesnake (*Crotalus oreganus*)

(excluding Willamette Valley populations)

Pacific Gopher Snake (*Pituophis catenifer*)

Western Terrestrial Garter Snake (*Thamnophis elegans*)

Northwestern Garter Snake (*Thamnophis sirtalis*)

- Minimum caging requirement for up to two individuals includes an enclosure with a perimeter at least 1.5 times the length of the longest specimen. The width of the enclosure shall not be less than 20% of the length of the longest animal. For each additional animal, increase the perimeter by 10%.
- The enclosure must have a lid that provides ventilation and prevents escape. Rattlesnake enclosures require a lockable lid that controls access.
- Provide suitable clean non-toxic substrate over the aquarium floor.
- Provide continuous access to an unchlorinated or de-chlorinated water source large enough for full emersion.
- Aquaria surfaces, water and substrates should be cleaned or changed as needed to maintain sanitary conditions.
- Appropriate food sources should be offered once a week for juvenile snakes and up to once a month for adults.
- Suitable diurnal and nocturnal temperature gradients should be maintained within the cage.
- Provide full spectrum light and a heat lamp during daylight hours.
- Provide climbing opportunities.
- Provide rough surfaces to facilitate the shedding process.
- Provide hiding habitat to minimize stress.

For additional captive care requirements for individual animals or animal group type, holders of amphibians and reptiles should consult:

American Society of Ichthyologists and Herpetologists (ASIH) 2004 -- Guidelines for Use of Live Amphibians and Reptiles in Field and Laboratory Research, Second Edition, Revised by the Herpetological Animal Care and Use Committee (HACC), 2004. (Committee Chair: Steven J. Beaupre, Members: Elliott R. Jacobson, Harvey B. Lillywhite, and Kelly Zamudio).

<http://www.asih.org/sites/default/files/documents/resources/guidelinesherpsresearch2004.pdf>

