CITIZEN PETITION FORM

		Date:	9/30/2020
Issue:			
Which rule are you seeking to create or revise? Please include a copy of the rule you are proposing to create or change, preferably with the change made in redline format.			
unregulated		ser hedgehog te	nrec) to be added to the list of
Why are you seeking to create or revise this rule? Please include a general statement of the reasons for the requested rule or revision and any relevant information related to the request.			
threat to Col	lorado's agriculture, nativ any Colorado residents,	ve wildlife, native	an animal that poses no vegetation, or residents. who would like to keep this
Petitioner's r	name:	Mallorie Short	

Petition to Legalize the Lesser Hedgehog Tenrec (Echinops telfairi) in the state of Colorado
Mallorie Short
September 2020





The lesser hedgehog tenrec (Echinops telfairi) is a small mammal, about 100-300 grams, that is covered in spikes similar to a hedgehogs. They originated in Madagascar and are completely unrelated to hedgehogs. They make calm and interesting pets and have many unique traits that could make them valuable in a classroom or laboratory setting. They enjoy climbing and will grasp small objects that are handed to them. Tenrecs do not have external sex organs, they have a cloaca like a bird or reptile. Tenrecs do a poor job of regulating their body temperature on their own and will bask in the sun or go into torpor (mini hibernation) as necessary. According to a private conversation with Dr. Frank van Breukelen, a professor at the University of Nevada who uses tenrecs in his research on hibernation, they were originally brought to the United States by researchers at Johns Hopkins University in the late 1960s, and again by a Texas-based company in the 2000s.

1. The scientific and common name or names including subspecies.

Echinops telfairi is commonly known as the lesser hedgehog tenrec. It is the only species in the Echinops genus. (Myers, 2020)

2. Habitat requirements and limitations, including an assessment of its survivability in Colorado's native habitats.

E. telfairi is native to arid regions of southern Madagascar. It does best in temperatures above 60F. Multiple studies have found that it is unable to successfully hibernate and revive at temperatures of 11C (51.8F) and below. (Scholl, 1974) (Dausmann, 2020) Echinops telfairi is unable to survive in the wild in Colorado where winter temperatures average 32F. (National Weather Service, 2020)

- 3. The potential of the species to negatively impact or destroy native vegetation.
 - E. telfairi does not eat, chew, dig excessively, or otherwise destroy vegetation.
- 4. All known associated diseases, including zoonotic diseases and parasites.

In captivity they are prone to metabolic bone disease, a degenerative disorder caused by inadequate calcium or excessive phosphorous in the diet. The body pulls calcium from the bones and leaves the animal unable to walk. This disease is also common in reptiles, hedgehogs, and sugar gliders when they do not receive a proper diet. (Divers, 2020) (Metabolic Bone Disease (MBD) in the lesser hedgehog tenrec, n.d.)

The Wikipedia article for E. telfairi says they are host to an intestinal parasite called Promoniliformis ovocristatus but their source, dated 1963, is in French and I was unable to find mention of parasites in any other sources.

- 5. Predatory behavior, including assessment of the anticipated effect predation by the species would have on native wildlife and domestic animals.
 - E. telfairi is primarily an insectivore that will also eat other small animals if given the opportunity. Its small size and inability to survive winters in Colorado make it very unlikely that this animal could do any significant damage to any native insects or wildlife. E. telfairi would likely be a target of many native animals such as birds-of-prey, crows, housecats, coyotes, foxes, etc.
- 6. An assessment of the potential of the species to damage or destroy agricultural crops or rangeland.

None. These animals are small and do not damage vegetation.

7. An assessment of the ability of the species to breed with native wildlife and domestic animals.

None. It is completely unrelated to any native wildlife or domestic animals. Echinops telfairi is the only animal in the Echinops genus and is unable to reproduce with any other animal aside from itself.

- 8. Fecundity and reproductive behavior.
 - E. telfairi only breeds once a year for about 3-4 weeks after they awake from hibernation. They have long pregnancies that last around 50 days and produce 3-5 young on average. The young start eating solid food around 2 weeks of age and wean around 5 weeks of age. (Künzle, 1998) (Godfrey & Oliver, 1978)

9. Assessment of the competition this species would have with native wildlife and domestic animals for food, water, and space.

Limited. This animal would wander around eating whatever insects and small animals it happens to find until it is either eaten by another animal or the weather becomes too cold for it to survive.

10. Information about the regulatory status of the species in Arizona, Nevada, Utah, Wyoming, Nebraska, Kansas, Oklahoma, New Mexico, Idaho, and Montana.

E. telfairi is legal in Utah (UT Admin Code R657-3. Collection, Importation, Transportation, and Possession of Animals., 2020), Kansas (All Regulations 9/18/2020, 2020, pp. 115-20-3), and Idaho (Current AGRI, 2020). It is worth noting that E. telfairi were legalized in Utah in 2015 through a similar process. (Tenrecs - Storybook Hedgehogs, 2020)

Similar to Colorado's current requirements, a permit is required to keep E. telfairi in Arizona (Arizona Game and Fish Laws and Rules, 2020, p. 188), Nevada (NAC: Chapter 503 - HUNTING, FISHING AND TRAPPING; MISCELLANEOUS PROTECTIVE MEASURES, 2018, p. 503.110), Wyoming (Chapter 10 REGULATION FOR... LIVE WILDLIFE, 2014, pp. 10-6), Nebraska (Nebraska.gov, 2019, pp. 4-008-9), Oklahoma (Oklahoma Administrative Code and Register, 2020, pp. 800:25-25-3), New Mexico (Director's Species Importation List, 2010), and Montana (Rule Subchapter: 12.6.22, 2010). It is not explicitly prohibited in any of these states.

11. Information about the regulatory prohibitions of the species in any city or county within Colorado.

There are no known regulations or prohibitions specific to this animal within the state of Colorado. The city and county of Denver makes no reference to this animal.

12. Assessment of the "weediness" of the animal. The "weediness" of an animal shall be defined and assessed by the following criteria: 1) Characterization of the aggressiveness of the animal, 2) its ability to thrive in Colorado, 3) its ability to disperse widely or pioneer, 4) its reproductive potential, and 5) its ability to adapt to other food sources (opportunistic feeding ability).

E. telfairi is typically calm and quiet, and will only act aggressively when provoked. They have zero ability to thrive in Colorado since they are unable to survive temperatures below 50F. These animals only breed once a year right after they wake from hibernation. Since they are unable to survive winter in Colorado they will be unable to breed in the wild in Colorado. (Scholl, 1974) (Dausmann, 2020)

13. Cite whether the species is listed by the Convention of International Trade in Endangered Species (CITES), and if so, on which appendix.

No animals in the tenrec family are listed by CITES. (Checklist of CITES Species, 2020)

14. An assessment of the potential for illegal trafficking of the species within the United States and internationally.

There is little to no monetary gain to be had through illegal trafficking because of how widely available this animal is both in the US and Europe.

Captive-bred animals are readily available from breeders within the United States who can be found via Google search, Craig's List ads, and Facebook groups. These tenrecs sell for \$400-\$900 within the US depending on age and sex. There seems to be similar availability overseas in European countries. One US breeder in Washington state was able to legally import E. telfairi from a breeder in Hungary.

15. An assessment of the impacts to wild populations of the species if legal possession and trade were allowed.

This animal is already common in the science and pet trades of the United States and Europe. It reproduces well enough in captivity that further importation of wild specimens is unnecessary and would not be profitable. The IUCN lists them as "least concern". (Echinops telfairi (Lesser Hedgehog Tenrec), 2015)

16. An assessment of the care and welfare requirements of the species.

According to various breeder websites and pet keepers on Facebook groups, the care and keeping of these animals is very similar to the African Pygmy Hedgehog. They have a nearly identical diet consisting of dry cat food with a variety of insects and calcium supplements to prevent metabolic bone disease. (Nijboer, 2020) Recommended housing be a minimum of 4 sq. ft. and will ideally give them the opportunity to climb. For exercise they will utilize a running wheel similar to those used by rodents and hedgehogs. This species enjoys sand baths and should be given the opportunity to take a sand bath at least once a week. They do well at room temperature as long as the temperature doesn't fall below 60F, although some people argue that they should be given supplemental heat to keep them above 70F. (Everything Tenrec, 2020)

There are a few older articles about husbandry in the laboratory setting but they seem outdated and the standards are lower than what the pet community is currently recommending.

17. Assessment of the danger this animal poses to humans if it were to escape.

None. This animal is not poisonous or venomous and is too small to cause serious injury with its bite. It mostly eats insects and small animals such so it would not be interested in infesting dwellings or farms in any detrimental way.

Regulation of a harmless species such as E. telfairi is a waste of resources and does not serve to protect Colorado or the animal itself. This animal poses no threat to agriculture, native wildlife, native vegetation, or humans. It is a novelty for exotic animal enthusiasts and has potential as an educational classroom pet but its high price, difficult and seasonal breeding habits, and tendency to hibernate for nearly half the year make it unlikely to be abused or mass produced for the pet trade.

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All marine animals (vertebrates and invertebrates) except for anadromous and catadromous species.

Mammals:

African pygmy hedgehog (Atelerix albiventris, Erinaceus albiventris)

Sugar Gliders (Petaurus breviceps)

Short-tailed Possum (Monodelphis domestica)

Dama (Tammar) Wallaby (Macropus eugenii)

Swamp Wallaby (Wallabia bicolor)

Bennet (Red-necked) Wallaby (Macropus rufogriseus)

Red Kangaroo (Macropus rufus)

Wallaroo (Macropus robustus)

Zebras and Zebra hybrids

Lesser Hedgehog Tenrec (Echinops telfairi)

Fishes:

All tropical and subtropical fishes

Common goldfish (Carassius auratus)

Koi

Birds:

All tropical and subtropical birds in the Order Passeriformes: including but not limited to birds in the families:

Sturnidae (Mynahs)

Ramphastidae (Toucans, Toucanettes)

Fringillidae (Siskins)

Estrildidae (Finches)

Emberizidae (Cardinals)

Ploceidae (Weavers)

Timaliidae (Mesias)

Viduinae (Wydahs)

Thraupidae (Tanagers)

Zosteropidae (Zosterops).

European Goldfinch (Carduelis carduelis)

All Psitticine birds

Reptiles and Amphibians:

All non-native tropical and sub-tropical species of snakes in the families:

Boidae (giant snakes)

Colubridae (modern snakes), except venomous species

Acrochordidae (file and elephant trunk snakes)

Xenopeltidae (sunbeam snakes)

Aniliidae (pipe snakes)

Uropeltidae (shield-tailed snakes)

All non-native tropical and subtropical species of lizards in the following families or subfamilies:

Agamidae (chisel-teeth lizards)

Anelytropsidae (snake lizards)

Anguidae (glass and alligator lizards)

Chamaeleonidae (chameleons)

Cordylidae (girdle-tailed lizards)

Corytophanidae (casquehead lizards)



Director's Office 6060 Broadway Denver, CO 80216 P 303.297.1192

TO:

Ms. Mallorie Short

RE:

Petition to add the lesser hedgehog tenrec to Colorado's list of unregulated wildlife

Dear Ms. Short:

Colorado Parks and Wildlife (CPW) has received your September 30, 2020, petition to add *Echinops telfairi* (the lesser hedgehog tenrec) to the list of unregulated wildlife in Ch. W-11, #1103.B. The Parks and Wildlife Commission will consider your petition at its scheduled meeting on January 14, 2021. For the reasons explained below, the Division of Parks and Wildlife opposes your petition and will recommend the Commission deny it.

The CPW Commission's regulation concerning citizen petitions is W-16, #1606. The CPW Commission's policy implementing this regulation is available at https://cpw.state.co.us/Documents/Commission/policy_procedures/POLICY-Public_Rulemaking_Petitions.pdf.

A petitioner bears the burden of demonstrating that the Commission should add a species to the list of unregulated wildlife. Ch. W-11, #1114.A. When evaluating a petition to add species, the Commission takes "a risk averse precautionary approach." Ch. W-11, #1114.B. The Commission may grant a petition only when "there is compelling scientific consensus that the species will not threaten public health, safety or welfare, or native wildlife, ecosystems, agricultural operations or wild populations of the species in question." *Id.* "If the impacts from the species are unknown," the petition "will be denied." *Id.*

Your petition to add the lesser hedgehog tenrec to the list of unregulated wildlife fails to meet this high standard. For example, it does not demonstrate a "compelling scientific consensus" that adding the species to the list would not threaten native wildlife or ecosystems by:

- spreading zoonotic diseases or parasites;
- preying upon native wildlife or invertebrates;
- · competing with native wildlife for food or other resources; and
- establishing wild populations in any region of Colorado.

In addition, you cite no evidence supporting your claims that:

- the lesser hedgehog tenrec would not destroy native vegetation;
- native species would likely prey upon the lesser hedgehog tenrec;
- the lesser hedgehog tenrec would not damage crops or rangeland;
- the lesser hedgehog tenrec cannot reproduce with native wildlife;
- the lesser hedgehog tenrec would present only limited competition with native wildlife for resources; and
- the lesser hedgehog tenrec is aggressive only when provoked.



Even your claim that the lesser hedgehog tenrec could not survive and disperse in Colorado, for which you cite some evidence of its temperature requirements, fails to establish a "compelling scientific consensus" that the species could not become established in *any* region of this climatically diverse state.

In short, the Division does not believe you have met your burden of demonstrating the Commission should add the lesser hedgehog tenrec to the list of unregulated wildlife. Despite the information in your petition, there is significant uncertainty about the consequences of adding this species to the list of unregulated wildlife. With this uncertainty, we cannot recommend the Commission grant your petition. Ch. W-11, #1114.B.

Lastly, CPW is engaged in other regulatory priorities, which must take precedence at this time, including the reintroduction of wolves and the allocation of limited big game hunting licenses.

Respectfully,

Daniel Prenzlow

Director, Division of Parks and Wildlife