

Species in the Biobanking role

7 species

Species for which the long-term storage of sperm or cells to perpetuate their genetic variation is urgently recommended, due the serious threat of extinction of the species.

Species	Extinction Risk	Phylogenetic Significance	Biological Distinctiveness	Captive Breeding	Comments
<i>Anaxyrus baxteri</i>	Extinct in the Wild (EW)	4.553204971	No aspect of biology known to be exceptional	Yes bred to F2	Lannoo - thinks they're not EW, as he saw some natural-breeding events, not just introduced ones; (but doesn't recommend changing Red List).
<i>Anaxyrus houstonensis</i>	Critically Endangered (CR)	4.553204971	No aspect of biology known to be exceptional	Yes bred to F2	Crump/Gluesenkamp - education will be important to get private landowners to help, TPWD student program in place & youth Toad Trackers (Houston Zoo)
<i>Plethodon ainsworthi</i>	Extinct (EX)	30.07718822	No aspect of biology known to be exceptional	Not held in captivity to date	Extinct species - but we evaluated it with the understanding that if it reappears; education warranted, if rediscovery; Dodd - distinctive morphologically - elongated and skinny.
<i>Ambystoma bishopi</i>	Vulnerable (VU)	42.62276683	No aspect of biology known to be exceptional	Maintained but no successful breeding	May qualify as endangered; Dodd - ongoing studies by Fla F&GC; Dodd - protection is Eglin AFB & Apalachicola WA; Barber - Jacksonville Zoo has plans to reintroduce in future; Dodd/Barrett - threats are climate change (droughts) and no one else is filling breeding ponds (Barrett - mitigation - habitat loss/ increased connectivity/landscape level occupancy/fill ponds). Barrett - so few populations left, expect difficult to resolve issue. Dodd - analog for cingulatum (which is even more critical); Dodd - education (attractiveness, habitat, regional endemic);
<i>Ambystoma californiense</i>	Vulnerable (VU)	42.62276683	No aspect of biology known to be exceptional	Yes bred to F1	Lannoo - new threat is genetic pollution from introduced tiger salamanders; Gluesenkamp-extirpation includes fish in stock pools; Gluesenkamp mentions that hybridized specimens could be culled from ponds. Gluesenkamp - bred by Brad Schaffer (now at UCLA); Gluesenkamp- "Poster child" for loss of Valley ecosystems.

<i>Ambystoma cingulatum</i>	Vulnerable (VU)	42.62276683	No aspect of biology known to be exceptional	Maintained but no successful breeding	Dodd - possibly extinct in SC/GA, but FL populations known extant in last two years; Barrett - not seen in GA in more than a decade; Bishop is an analog for this species.; All - regional species awareness and threat awareness would be beneficial similar to small range species, Range state approval (Barrett - no in GA, Dodd - FL is ?, and Riverbanks were wild caught, so potentially possible).
<i>Lithobates sevosus</i>	Critically Endangered (CR)	6.878410402	No aspect of biology known to be exceptional	Yes bred to F1	Hanna - TNC has bought up wetland sites for potential reintroduction; Lannoo - has been challenged for economic reasons for ESA (development); Memphis Zoo translocated some recently; Assisted Reproduction Technology used to produced frogs.
