

Species in the Rescue Role

6 species

Species that are in imminent danger of extinction (locally or globally) and require *ex situ* management, as part of an integrated program, to ensure their survival.

Species	Extinction risk	Habitat for reintroduction	Previous reintroductions	Phylogenetic study complete	Founders available	Threat Mitigation
<i>Anaxyrus houstonensis</i>	Critically	Yes	Yes but outcome is	Yes	Yes	Threats cannot/will not be reversed in
	Crump/Gluesenkamp - education will be important to get private landowners to help, TPWD student program in place & youth Toad Trackers (Houston Zoo) Habitat assessment for microhabitat needs (for toads) per Paul Crump					
<i>Plethodon ainsworthi</i>	Extinct (EX)	No	No	No	No	Threats cannot/will not be reversed in time
	Extinct species - but we evaluated it with the understanding that if it reappears; education warranted, if rediscovery; Dodd - distinctive morphologically - elongated and skinny. Nothing known as only from limited preserved specimens. Need to study natural history and causes of declines warranted, if rediscovered.					
<i>Ambystoma bishopi</i>	Vulnerable (VU)	Yes	No	Yes	Yes	Threats cannot/will not be reversed in time
	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); natural history lacking					
<i>Ambystoma californiense</i>	Vulnerable (VU)	Yes	No	Yes	Yes	Threats cannot/will not be reversed in time
	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)	Yes	No	Yes	Unknown	Threats cannot/will not be reversed in time
	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). Natural history lacking					
<i>Lithobates sevosus</i>	Critically Endangered (CR)	No	Yes but outcome is unknown	Yes	Yes	Threats cannot/will not be reversed in time
	Hanna - TNC has bought up wetland sites for potential reintroduction; Lannoo - has been challenged for economic reasons for ESA					