



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Red Hills Salamander

Phaeognathus hubrichti

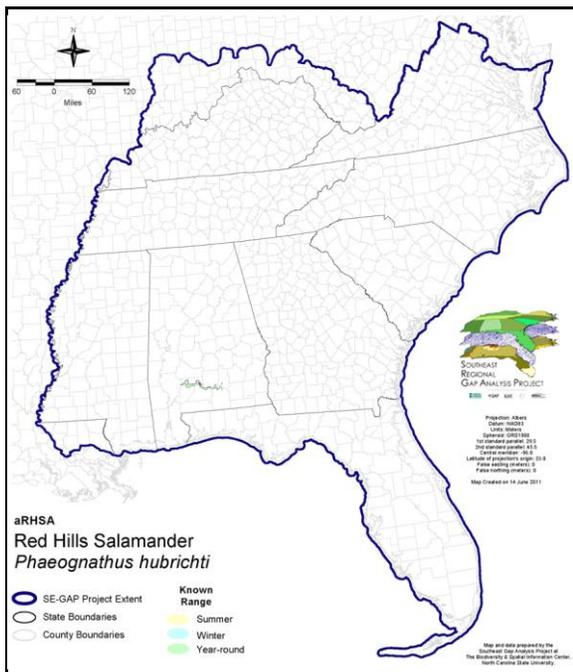
Taxa: Amphibian
 Order: Caudata
 Family: Plethodontidae

SE-GAP Spp Code: **aRHSA**

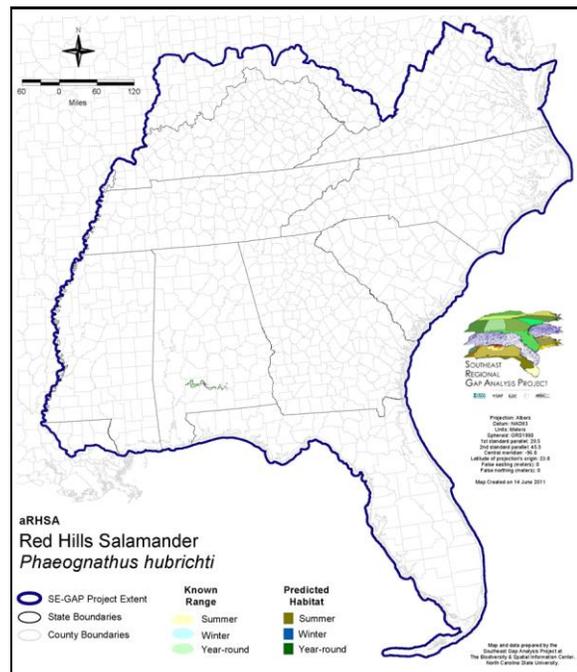
ITIS Species Code: 173725

NatureServe Element Code: AAAAD11010

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aRHSA.pdf

Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aRHSA.pdf

GAP Online Tool Link: <http://www.gapservice.ncsu.edu/segap/segap/index2.php?species=aRHSA>

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aRHSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: LT
 State Status: AL (SP)
 NS Global Rank: G2
 NS State Rank: AL (S2)

SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

| | US FWS | | US Forest Service | | Tenn. Valley Author. | | US DOD/ACOE | |
|----------|------------------------|-----|-----------------------|---|----------------------|---|-----------------------|---|
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Total | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| | US Dept. of Energy | | US Nat. Park Service | | NOAA | | Other Federal Lands | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Total | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| | Native Am. Reserv. | | State Park/Hist. Park | | State WMA/Gameland | | State Forest | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Total | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| | State Coastal Reserve | | ST Nat.Area/Preserve | | Other State Lands | | Private Cons. Easemt. | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Status 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Total | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| | Private Land - No Res. | | Water | | Overall Total | | | |
| | ha | % | ha | % | ha | % | ha | % |
| Status 1 | 0.0 | 0 | 0.0 | 0 | 0.0 0 | | | |
| Status 2 | 0.0 | 0 | 0.0 | 0 | 0.0 0 | | | |
| Status 3 | 0.0 | 0 | 0.0 | 0 | 0.0 0 | | | |
| Status 4 | 7,661.9 | 100 | 0.0 | 0 | 7,661.9 100 | | | |
| Total | 7,661.9 | 100 | 0.0 | 0 | 7,661.9 100 | | | |

GAP Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, and intensity) are allowed to proceed without interference or are mimicked through management.

GAP Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive use or management practices that degrade the quality of existing natural communities.

GAP Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type or localized intense type. It also confers protection to federally listed endangered and threatened species throughout the area.

GAP Status 4: Lack of irrevocable easement or mandate to prevent conversion of natural habitat types to anthropogenic habitat types. Allows for intensive use throughout the tract. Also includes those tracts for which the existence of such restrictions or sufficient information to establish a higher status is unknown.

PREDICTED HABITAT MODEL(S):

Year-round Model:

Habitat Description: The red hills salamander lives in burrows on the slopes of shaded, mesic ravines dominated by hardwood trees (Mount 1975 and Mount 1984). They are confined to the Tallahatta and Hatchetigbee formations. North-facing slopes with mature with mature hardwood canopies provide optimal habitats. Burrows are typically constructed on ravine slopes that are too steep to hold leaf litter, but are occasionally found on nearly level land with leaf litter. Outcroppings or layers of siltstone or claystone near the surface and loamy friable topsoils are usually present in habitats occupied by this salamander (Mount 1986). Forestry techniques involving clear-cutting and mechanical site preparation has greatly degraded habitat and destroys burrows (Petranka 1998). Stacy Smith, 15April05

Selected Map Units:

| Functional Group | Map Unit Name |
|------------------|---|
| Forest/Woodland | East Gulf Coastal Plain Limestone Forest |
| Forest/Woodland | East Gulf Coastal Plain Southern Mesic Slope Forest |

- CITATIONS:** Mount, R. H. 1975. The Reptiles and Amphibians of Alabama. Auburn University Agricultural Experiment Station, Auburn, Alabama. vii + 347 pp.
- Mount, R.H, (ed). 1984 Vertebrate Wildlife of Alabama, Alabama Agricultural Experiment Station, Auburn University, 44 pp.
- Mount, R.H. (ed) 1986. Vertabate Animals of Alabama in Need of Special Attention, Alabama Agricultural Experiment Station, Auburn University, 124 pp
- Petranka, J. W. 1998. Salamanders of the United States and Canada. Washington DC: Smithsonian Inst. Press.
- Petranka, J. W., M. E. Eldridge, and K. E. Haley. 1993. Effects of timber harvesting on southern Appalachian salamanders. Conservation Biology 7(2):363-370.

For more information:: SE-GAP Analysis Project / BaSIC
127 David Clark Labs
Dept. of Biology, NCSU
Raleigh, NC 27695-7617
(919) 513-2853
www.basic.ncsu.edu/segap

Compiled: 15 September 2011

This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University.