

APPENDIX A:

1 **15A NCAC 10I .0103 ENDANGERED SPECIES LISTED**

2 (a) The following species of resident wildlife shall be designated as federally-listed endangered species:

3 (1) Amphibians: None Listed At This Time.

4 ~~None Listed At This Time.~~

5 (2) Birds:

6 (A) Bachman's warbler (*Vermivora bachmanii*);

7 (B) Ivory-billed woodpecker (*Campephilus principalis*);

8 (C) Kirtland's warbler (~~*Dendroica*~~ *Setophaga kirtlandii*);

9 (D) Piping plover (*Charadrius melodus circumcinctus*);

10 (E) Red-cockaded woodpecker (*Picoides borealis*); and

11 (F) Roseate tern (*Sterna dougallii* ~~*dougalli*~~); and *dougallii*.

12 ~~(G) Wood stork (*Mycteria americana*).~~

13 (3) Crustacea: None Listed At This Time.

14 (4) Fish:

15 (A) Cape Fear shiner (*Notropis mekistocholas*);

16 (B) Roanoke logperch (*Percina rex*);

17 (C) Shortnose sturgeon (*Acipenser brevirostrum*), when found in inland fishing waters as
18 defined in G.S. 113-129(9a) and (9b); and

19 (D) Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), when found in inland fishing waters.

20 (5) Mammals:

21 (A) Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*);

22 (B) Eastern cougar (*Puma concolor*);

23 (C) Gray bat (*Myotis grisescens*);

24 (D) Indiana bat (*Myotis sodalis*);

25 (E) Manatee (*Trichechus manatus*), when found in inland fishing waters; and

26 (F) Virginia big-eared bat (*Corynorhinus townsendii virginianus*).

27 (6) Mollusks:

28 (A) Appalachian elktoe (*Alasmidonta raveneliana*);

29 (B) Carolina heelsplitter (*Lasmigona decorata*);

30 (C) Dwarf ~~wedge-mussel~~ wedgemussel (*Alasmidonta heterodon*);

31 (D) James spinymussel (*Pleurobema collina*);

32 (E) ~~Little-wing~~ Littlewing pearl mussel (*Pegias fabula*);

33 (F) Tan riffleshell (*Epioblasma florentina walkeri*); and

34 (G) Tar River spinymussel (*Elliptio steinstansana*).

35 (7) Reptiles:

36 (A) Kemp's ridley sea turtle (*Lepidochelys kempii*);

37 (B) Atlantic hawksbill sea turtle (*Eretmochelys imbricata imbricata*); and

- 1 (C) Leatherback sea turtle (*Dermochelys coriacea*).
- 2 (b) The following species of resident wildlife shall be designated as state-listed endangered species:
- 3 (1) Amphibians: ~~Green salamander (*Aneides aeneus*).~~
- 4 (A) Gopher frog (*Rana [=Lithobates] capito*);
- 5 (B) Ornate chorus frog (*Pseudacris ornata*); and
- 6 (C) River frog (*Rana [=Lithobates] heckscheri*).
- 7 (2) Birds:
- 8 (A) American peregrine falcon (*Falco peregrinus anatum*); ~~and~~
- 9 (B) Bewick's wren (*Thryomanes bewickii*);
- 10 (C) Common tern (*Sterna hirundo*);
- 11 (D) Henslow's sparrow (*Ammodramus henslowii*); and
- 12 (E) Wayne's black-throated green warbler (*Setophaga virens waynei*).
- 13 (3) Crustacea: ~~Bennett's Mill cave water slater (*Caecidotea carolinensis*).~~
- 14 (A) Bennett's Mill cave water slater (*Caecidotea carolinensis*).
- 15 (4) Fish:
- 16 (A) Blotchside logperch (*Percina burtoni*);
- 17 (B) Bridle shiner (*Notropis bifrenatus*);
- 18 (C) Dusky darter (*Percina sciera*);
- 19 (D) Orangefin madtom (*Noturus gilberti*);
- 20 (E) Paddlefish (*Polyodon spathula*);
- 21 (F) Robust redhorse (*Moxostoma robustum*);
- 22 (G) Rustyside sucker (*Thoburnia hamiltoni*); and
- 23 (H) Sharpnose darter (*Percina oxyrhynchus*); and
- 24 ~~(H)(I)~~ Stonecat (*Noturus flavus*).
- 25 (5) Mammals: None Listed At This Time.
- 26 (6) Mollusks:
- 27 (A) Atlantic pigtoe (*Fusconaia masoni*);
- 28 (B) Barrel floater (*Anodonta couperiana*);
- 29 (C) Brook floater (*Alasmidonta varicosa*);
- 30 (D) Carolina creekshell (*Villosa vaughaniana*);
- 31 (E) Fragile glyph (*Glyphyalinia clingmani*);
- 32 (F) Green floater (*Lasmigona subviridis*);
- 33 (G) Greenfield rams-horn (*Helisoma eucosmium*)
- 34 (H) Knotty elimia (*Elimia christyi*);
- 35 (I) Longsolid (*Fusconaia subrotunda*);
- 36 ~~(H)(J)~~ Magnificent rams-horn (*Planorbella magnifica*);
- 37 (J) ~~Neuse spike (*Elliptio judithae*);~~

- 1 (K) Purple wartyback (*Cyclonaias tuberculata*);
- 2 (L) Savannah lilliput (*Toxolasma pullus*);
- 3 (M) Slippershell mussel (*Alasmidonta viridis*);
- 4 (N) Tennessee clubshell (*Pleurobema oviforme*);
- 5 (O) Tennessee heelsplitter (*Lasmigona holstonia*);
- 6 (P) Tennessee pigtoe (*Fusconaia barnesiana*);
- 7 (Q) Yellow lampmussel (*Lampsilis cariosa*); and
- 8 (R) Yellow lance (*Elliptio lanceolata*).
- 9 (7) Reptiles:
- 10 (A) Eastern coral snake (*Micrurus fulvius fulvius*); and
- 11 (B) Eastern diamondback rattlesnake (*Crotalus adamanteus*).

12

13 *History Note:* Authority G.S. 113-134; 113-291.2; 113-292; 113-333;

14 Eff. June 11, 1977;

15 Amended Eff. October 1, 2017; August 1, 2016; May 1, 2008; April 1, 2001; February 1, 1994;

16 November 1, 1991; April 1, 1991; June 1, 1990.

1 **15A NCAC 10I .0104 THREATENED SPECIES LISTED**

2 (a) The following species of resident wildlife shall be designated as federally-listed threatened species:

- 3 (1) Amphibians: None Listed At This Time.
- 4 (2) Birds:
- 5 (A) Piping plover (*Charadrius melodus melodus*); ~~and~~
- 6 (B) Red ~~Knot knot~~ (~~*Calidris*~~ *Calidris canutus rufa*); and
- 7 (C) ~~Wood stork~~ (*Mycteria americana*).
- 8 (3) Crustacea: None Listed At This Time.
- 9 (4) Fish:
- 10 (A) Spotfin chub (~~*Cyprinella monacha*~~ *Erimonax monachus*); and
- 11 (B) Waccamaw silverside (*Menidia extensa*).
- 12 (5) Mammals: Northern ~~Long-eared Bat~~ long-eared bat (*Myotis septentrionalis*)
- 13 (6) Mollusks: Noonday globe (*Patera clarki nantahala*).
- 14 (7) Reptiles:
- 15 (A) Bog turtle (*Glyptemys muhlenbergii*);
- 16 (B) American alligator (*Alligator mississippiensis*);
- 17 (C) Green sea turtle (*Chelonia mydas*); and
- 18 (D) Loggerhead sea turtle (*Caretta caretta*).

19 (b) The following species of resident wildlife are designated as state-listed threatened species:

- 20 (1) Amphibians:
- 21 (A) ~~Carolina gopher frog~~ (~~*Rana capito capito*~~);
- 22 (B)(A) Eastern tiger salamander (*Ambystoma tigrinum tigrinum*);
- 23 (B) ~~Green salamander~~ (*Aneides aeneus*);
- 24 (C) Junaluska salamander (*Eurycea junaluska*); ~~and~~
- 25 (D) Mabee's salamander (*Ambystoma mabeei*); and
- 26 (D)(E) Wehrle's salamander (*Plethodon wehrlei*).
- 27 (2) Birds:
- 28 (A) Bald eagle (*Haliaeetus leucocephalus*);
- 29 (B) Caspian tern (*Hydroprogne caspia*);
- 30 (B)(C) Gull-billed tern (~~*Sterna*~~ *Gelochelidon nilotica aranea*); and
- 31 (C)(D) Northern saw-whet owl (*Aegolius acadicus*).
- 32 (3) Crustacea: None Listed At This Time.
- 33 (4) Fish:
- 34 (A) ~~American brook lamprey~~ (~~*Lampetra appendix*~~);
- 35 (B) ~~Banded sculpin~~ (~~*Cottus carolinae*~~);
- 36 (C)(A) Bigeye jumprock (~~*Scartomyzon ariommus*~~ *Moxostoma ariommum*);
- 37 (D) ~~Blackbanded darter~~ (~~*Percina nigrofasciata*~~);

- 1 ~~(E)~~(B) Carolina madtom (*Noturus furiosus*);
- 2 ~~(F)~~(C) Carolina pygmy sunfish (*Elassoma boehlkei*);
- 3 ~~(G)~~(D) Carolina redhorse (*Moxostoma* sp.) (Pee Dee River and its tributaries and Cape Fear River
- 4 and its tributaries);
- 5 ~~(H)~~(E) Least brook lamprey (*Lampetra aepyptera*);
- 6 ~~(I)~~(F) Logperch (*Percina caprodes*);
- 7 (G) Mimic shiner (*Notropis volucellus*);
- 8 ~~(J)~~(H) Rosyface chub (*Hybopsis rubrifrons*);
- 9 ~~(K)~~(I) Sharphead darter (*Etheostoma acuticeps*);
- 10 ~~(L)~~(J) Sicklefin redhorse (*Moxostoma* sp.) (Hiwassee River and its tributaries and Little
- 11 Tennessee River and its tributaries);
- 12 ~~(M)~~(K) Turquoise darter (*Etheostoma inscriptum*); and
- 13 ~~(N)~~(L) Waccamaw darter (*Etheostoma perlongum*).
- 14 (5) Mammals:
- 15 (A) Eastern woodrat (*Neotoma floridana floridana*);
- 16 (B) Rafinesque's big-eared bat (*Corynorhinus rafinesquii rafinesquii*); and
- 17 (C) Red wolf (*Canis rufus*).
- 18 (6) Mollusks:
- 19 (A) Alewife floater (*Anodonta implicata*);
- 20 (B) Big-tooth covert (*Fumonelix jonesiana*);
- 21 (C) Cape Fear threetooth (*Triodopsis soelneri*);
- 22 (D) Carolina fatmucket (*Lampsilis radiata conspicua*);
- 23 ~~(E)~~ ~~Clingman covert (*Fumonelix wheatleyi clingmanicus*)~~;
- 24 ~~(F)~~(E) Eastern lampmussel (*Lampsilis radiata radiata*);
- 25 ~~(G)~~(F) Eastern pondmussel (*Ligumia nasuta*);
- 26 ~~(H)~~(G) Engraved covert (*Fumonelix orestes*);
- 27 ~~(I)~~(H) Mountain creekshell (*Villosa vanuxemensis*);
- 28 (I) Notched rainbow (*Villosa constricta*);
- 29 (J) Rainbow (*Villosa iris*);
- 30 ~~(K)~~(K) Roan supercoil (*Paravitrea varidens*);
- 31 ~~(L)~~ ~~Roanoke slabshell (*Elliptio roanokensis*)~~;
- 32 (L) Sculpted supercoil (*Paravitrea ternaria*);
- 33 ~~(M)~~ ~~Seep mudalia (*Leptoxis dilatata*)~~;
- 34 ~~(N)~~(M) Smoky Mountain covert (*Inflectarius ferrissi*);
- 35 ~~(O)~~(N) Squawfoot (*Strophitus undulatus*);
- 36 ~~(P)~~(O) Tidewater mucket (*Leptodea ochracea*);
- 37 ~~(Q)~~(P) Triangle floater (*Alasmidonta undulata*);

- 1 ~~(R)~~(Q) Waccamaw ambersnail (*Catinella waccamawensis*);
2 ~~(S)~~(R) Waccamaw fatmucket (*Lampsilis fullerkati*); and
3 ~~(T)~~(S) Waccamaw spike (*Elliptio waccamawensis*).
4 (7) Reptiles: ~~None Listed At This Time.~~
5 (A) Northern pine snake (*Pituophis melanoleucus melanoleucus*); and
6 (B) Southern hognose snake (*Heterodon simus*).

7
8 *History Note:* *Authority G.S. 113-134; 113-291.2; 113-292; 113-333;*
9 *Eff. March 17, 1978;*
10 *Amended Eff. October 1, 2017, June 1, 2008; April 1, 2001; November 1, 1991; April 1, 1991; June*
11 *1, 1990; September 1, 1989;*
12 *Temporary Amendment Eff. February 27, 2015;*
13 *Amended Eff. July 1, 2016; August 1, 2016.*

1 **15A NCAC 10I .0105 SPECIAL CONCERN SPECIES LISTED**

2 The following species of resident wildlife shall be designated as state-listed special concern species:

3 (1) Amphibians:

- 4 (a) Crevice salamander (*Plethodon longicrus*);
5 (b) Dwarf salamander (*Eurycea quadridigitata*);
6 (c) Dwarf black-bellied salamander (*Desmognathus folkertsi*);
7 ~~(d)~~ Eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*);
8 ~~(e)~~ Four-toed salamander (*Hemidactylium scutatum*);
9 (f) Gray treefrog (*Hyla versicolor*);
10 ~~(g)~~ Longtail salamander (*Eurycea longicauda longicauda*);
11 ~~(h)~~ Mole salamander (*Ambystoma talpoideum*);
12 ~~(i)~~ Mountain chorus frog (*Pseudacris brachyphona*);
13 ~~(j)~~ Mudpuppy (*Necturus maculosus*);
14 ~~(k)~~ Neuse River waterdog (*Necturus lewisi*);
15 (j) ~~River frog (*Rana heckscheri*);~~
16 ~~(l)~~ Southern zigzag salamander (*Plethodon ventralis*); and
17 ~~(m)~~ Weller's salamander (*Plethodon welleri*).

18 (2) Birds:

- 19 (a) American oystercatcher (*Haematopus palliatus*);
20 (b) Bachman's sparrow (~~*Aimophila*~~ *Peucaea aestivalis*);
21 (c) Barn owl (*Tyto alba*);
22 ~~(d)~~ Black-capped chickadee (*Poecile atricapillus*);
23 ~~(e)~~ Black rail (*Laterallus jamaicensis*);
24 ~~(f)~~ Black skimmer (*Rynchops niger*);
25 ~~(g)~~ Brown creeper (*Certhia americana nigrescens*);
26 ~~(h)~~ Cerulean warbler (~~*Dendroica*~~ *Setophaga cerulea*);
27 ~~(i)~~ ~~Common tern (*Sterna hirundo*);~~
28 (i) Glossy ibis (*Plegadis falcinellus*);
29 (j) Golden-winged warbler (*Vermivora chrysoptera*);
30 ~~(k)~~ ~~Henslow's sparrow (*Ammodramus henslowii*);~~
31 ~~(l)~~ ~~(k)~~ Least bittern (*Ixobrychus exilis*);
32 ~~(m)~~ ~~(l)~~ Least tern (~~*Sterna*~~ *Sternula antillarum*);
33 ~~(n)~~ ~~(m)~~ Little blue heron (*Egretta caerulea*);
34 ~~(o)~~ ~~(n)~~ Loggerhead shrike (*Lanius ludovicianus*);
35 ~~(p)~~ ~~Olive-sided flycatcher (*Contopus cooperi*);~~
36 ~~(q)~~ ~~(o)~~ Painted bunting (*Passerina ciris*);
37 ~~(r)~~ ~~(p)~~ Red crossbill (*Loxia curvirostra*);

- 1 ~~(s)~~(q) Snowy egret (*Egretta thula*);
- 2 ~~(t)~~(r) Tricolored heron (*Egretta tricolor*);
- 3 ~~(u)~~(s) Vesper sparrow (*Poocetes gramineus*); and
- 4 ~~(v)~~(t) Wilson's plover (*Charadrius wilsonia*); and wilsonia.
- 5 ~~(w)~~ ~~Yellow bellied sapsucker (*Sphyrapicus varius appalachiensis*).~~
- 6 (3) Crustacea:
- 7 (a) Broad River spiny crayfish (*Cambarus spicatus*);
- 8 (b) Carolina skistodiaptomus (*Skistodiaptomus carolinensis*);
- 9 (c) Carolina well diacyclops (*Diacyclops jeannelli putei*);
- 10 (d) Chowanoke crayfish (*Orconectes virginienensis*);
- 11 (e) Graceful clam shrimp (*Lynceus gracilicornis*);
- 12 (f) Greensboro burrowing crayfish (*Cambarus catagius*);
- 13 (g) Hiwassee headwaters crayfish (*Cambarus parrishi*);
- 14 (h) Little Tennessee River crayfish (*Cambarus georgiae*);
- 15 (i) North Carolina spiny crayfish (*Orconectes carolinensis*);
- 16 (j) Oconee stream crayfish (*Cambarus chaugaensis*); and
- 17 (k) Waccamaw crayfish (*Procambarus braswelli*).
- 18 (4) Fish:
- 19 ~~(a)~~ American brook lamprey (*Lethenteron appendix*);
- 20 ~~(b)~~ Banded sculpin (*Cottus carolinae*);
- 21 ~~(c)~~ Blackbanded darter (*Percina nigrofasciata*);
- 22 ~~(d)~~ Bluefin killifish (*Lucania goodei*);
- 23 ~~(e)~~ Blue Ridge sculpin (*Cottus caeruleomentum*);
- 24 ~~(f)~~ Blueside darter (*Etheostoma jessiae*);
- 25 ~~(g)~~ Broadtail madtom (*Noturus* sp.) (Lumber River and its tributaries and Cape Fear River and
- 26 its tributaries);
- 27 ~~(h)~~ Carolina darter (*Etheostoma collis*);
- 28 ~~(i)~~ Cutlip minnow (*Exoglossum maxillingua*);
- 29 ~~(j)~~ Freshwater drum (*Aplodinotus grunniens*) (French Broad River);
- 30 ~~(k)~~ Highfin carpsucker (*Carpoides velifer*) (Cape Fear River and its tributaries);
- 31 ~~(l)~~ Kanawha minnow (*Phenacobius teretulus*);
- 32 ~~(m)~~ Lake sturgeon (*Acipenser fulvescens*);
- 33 ~~(n)~~ Least killifish (*Heterandria formosa*);
- 34 ~~(o)~~ Longhead darter (*Percina macrocephala*);
- 35 ~~(p)~~ Mooneye (*Hiodon tergisus*);
- 36 ~~(q)~~ Mountain madtom (*Noturus eleutherus*);
- 37 ~~(r)~~ Ohio lamprey (*Ichthyomyzon bdellium*);

- 1 ~~(i)~~(j) Dwarf threetooth (*Triodopsis fulciden*);
- 2 ~~(j)~~(k) Fringed coil (*Helicodiscus fimbriatus*);
- 3 ~~(k)~~(l) Glossy supercoil (*Paravitrea placentula*);
- 4 ~~(l)~~(m) Great Smoky slitmouth (*Stenotrema depilatum*);
- 5 ~~(m)~~(n) High mountain supercoil (*Paravitrea andrewsae*);
- 6 ~~(n)~~(o) Honey glyph (*Glyphyalinia vanattai*);
- 7 ~~(o)~~(p) Lamellate supercoil (*Paravitrea lamellidens*);
- 8 ~~(p)~~(q) Mirey Ridge supercoil (*Paravitrea clappi*);
- 9 ~~(q)~~ ~~Notched rainbow (*Villosa constricta*);~~
- 10 (r) Open supercoil (*Paravitrea umbilicaris*);
- 11 (s) Pink glyph (*Glyphyalinia pentadelphia*);
- 12 (t) Pod lance (*Elliptio folliculata*);
- 13 (u) Queen crater (*Appalachina chilhoweensis*);
- 14 ~~(v)~~ ~~Rainbow (*Villosa iris*);~~
- 15 ~~(w)~~(v) Ramp Cove supercoil (*Paravitrea lacteodens*);
- 16 (w) Ridged lioplax (*Lioplax subcarinata*);
- 17 (x) Roanoke slabshell (*Elliptio roanokensis*);
- 18 ~~(x)~~(y) Saw-tooth disc (*Discus bryanti*);
- 19 (z) Seep mudalia (*Leptoxis dilatata*);
- 20 ~~(y)~~(aa) Spike (*Elliptio dilatata*);
- 21 ~~(z)~~(bb) Spiral coil (*Helicodiscus bonamicus*);
- 22 ~~(aa)~~(cc) Velvet covert (*Inflectarius subpalliatu*);
- 23 ~~(bb)~~(dd) Waccamaw amnicola (*Amnicola* sp.);
- 24 ~~(cc)~~ ~~Waccamaw lampmussel (*Lampsilis crocata*);~~
- 25 ~~(dd)~~(ee) Waccamaw siltsnail (*Cincinnati* sp.); and
- 26 ~~(ee)~~(ff) Wavy-rayed lampmussel (*Lampsilis fasciola*).
- 27 (7) Reptiles:
- 28 (a) Carolina pigmy rattlesnake (*Sistrurus miliarius miliarius*);
- 29 (b) Carolina swamp snake (*Seminatrix pygaea paludis*);
- 30 ~~(b)~~(c) Carolina watersnake (*Nerodia sipedon williamengelsi*);
- 31 (d) Cumberland slider (*Trachemys scripta troostii*);
- 32 ~~(c)~~(e) Diamondback terrapin (*Malaclemys terrapin*);
- 33 (f) Eastern chicken turtle (*Deirochelys reticularia reticularia*);
- 34 ~~(d)~~(g) Eastern smooth green snake (*Opheodrys vernalis vernalis*);
- 35 ~~(e)~~(h) Eastern spiny softshell (*Apalone spinifera spinifera*);
- 36 ~~(f)~~(i) Mimic glass lizard (*Ophisaurus mimicus*);
- 37 ~~(g)~~ ~~Northern pine snake (*Pituophis melanoleucus melanoleucus*);~~

- 1 ~~(h)~~(j) Outer Banks kingsnake (*Lampropeltis getula sticticeps*);
2 (i) ~~——~~ ~~Southern hognose snake (*Heterodon simus*);~~
3 ~~(j)~~(k) Stripeneck musk turtle (*Sternotherus minor peltifer*); and
4 ~~(k)~~(l) Timber rattlesnake (*Crotalus horridus*).

5

6 *History Note:* *Authority G.S. 113-134; 113-291.2; 113-292; 113-333;*

7 *Eff. September 1, 1989;*

8 *Amended Eff. October 1, 2017, August 1, 2016; May 1, 2008; July 18, 2002; April 1, 2001;*

9 *November 1, 1991; April 1, 1991; June 1, 1990.*

APPENDIX B:

Taxa	Common Name	Current Status	Proposed Status	Rule Change
Fish	Sharpnose Darter	SC	E	Uplist
Fish	Mimic Shiner	NL	T	List
Fish	Banded Sculpin	T	SC	Downlist
Fish	American Brook Lamprey	T	SC	Downlist
Fish	Blackbanded Darter	T	SC	Downlist
Fish	Ohio Lamprey	NL	SC	List
Fish	Riverweed Darter	SC	NL	Delist
Mollusk	Longsolid	NL	E	List
Mollusk	Notched Rainbow	SC	T	Uplist
Mollusk	Rainbow	SC	T	Uplist
Mollusk	Roanoke Slabshell	T	SC	Downlist
Mollusk	Clingman Covert	T	SC	Downlist
Mollusk	Seep Mudalia	T	SC	Downlist
Mollusk	Ridged Lioplax	NL	SC	List
Mollusk	Neuse Spike	E	NL	Delist
Mollusk	Waccamaw Lampmussel	SC	NL	Delist
Amphibian	Ornate Chorus Frog	NL	E	List
Amphibian	Carolina Gopher Frog	T	E	Uplist
Amphibian	River Frog	SC	E	Uplist
Amphibian	Green Salamander	E	T	Downlist
Amphibian	Mabee's Salamander	NL	T	List
Reptile	Northern Pine Snake	SC	T	Uplist
Reptile	Southern Hognose Snake	SC	T	Uplist
Amphibian	Dwarf Black-bellied Salamander	NL	SC	List
Amphibian	Northern Gray Treefrog	NL	SC	List
Reptile	Eastern Chicken Turtle	NL	SC	List
Reptile	Carolina Swamp Snake	NL	SC	List
Reptile	Cumberland Slider	NL	SC	List
Bird	Wayne's Black-throated Green Warbler	NL	E	List
Bird	Henslow's Sparrow	SC	E	Uplist
Bird	Common Tern	SC	E	Uplist
Bird	Caspian Tern	NL	T	List
Bird	Barn Owl	NL	SC	List
Bird	Olive-sided Flycatcher	SC	NL	Delist
Bird	Appalachian Yellow-bellied Sapsucker	SC	NL	Delist
Mammal	Southern Rock Shrew	SC	NL	Delist
Mammal	Southern Water Shrew	SC	NL	Delist

E - Endangered

T - Threatened

SC - Special Concern

NL - Not Listed

NCWRC Species Listing Abstract

Species Name: Dwarf Black-bellied Salamander

Desmognathus folkertsi

Current N.C. Status: Not Listed

Proposed N.C. Status: Special Concern

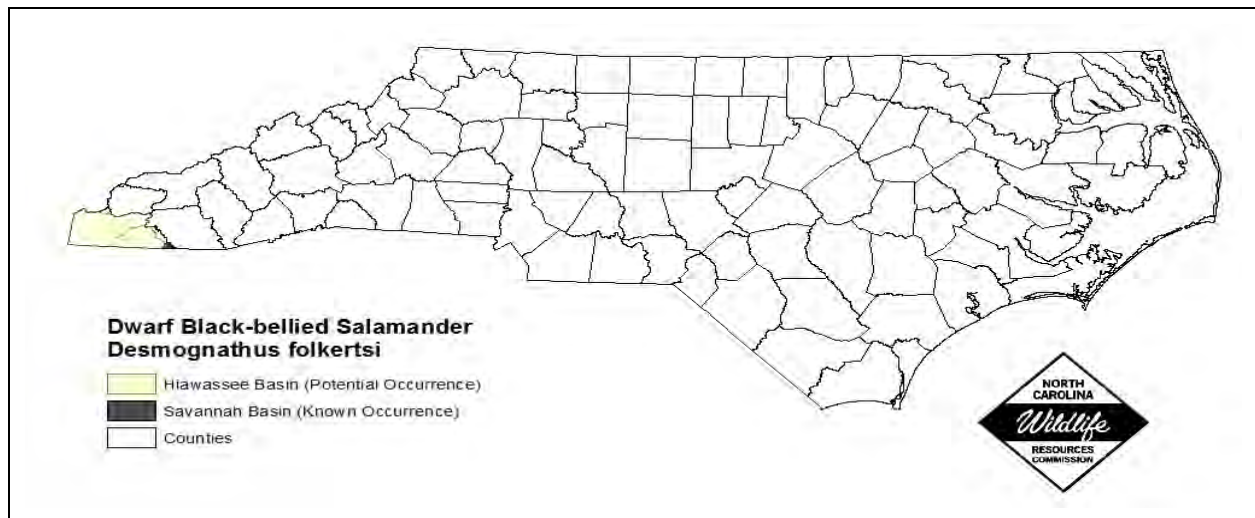


Status

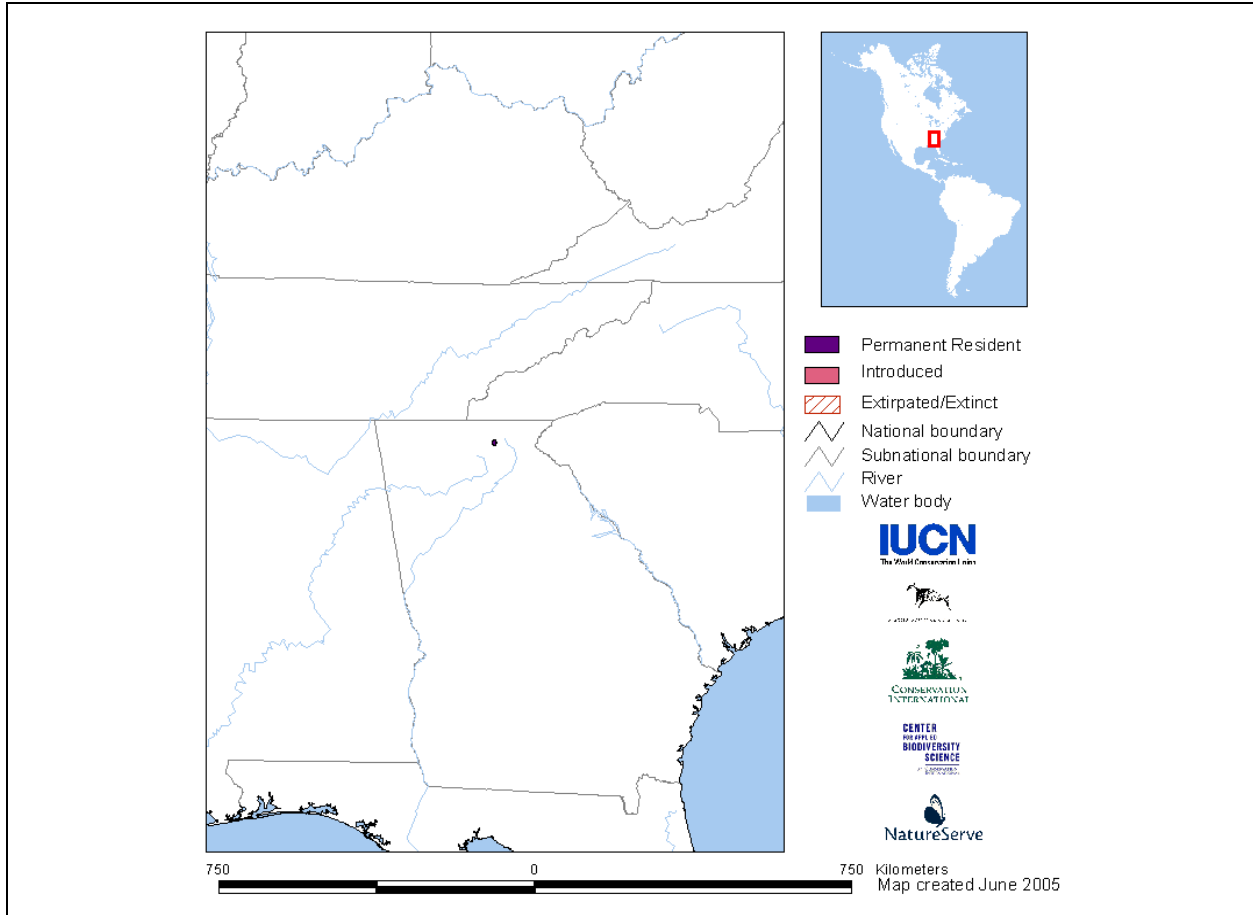
Federal	Not listed
Virginia	N/A
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Imperiled; State – Critically Imperiled
IUCN	Data Deficient

Range

The Dwarf Black-bellied Salamander occurs in North Carolina and Georgia. In North Carolina, it is only known to occur in Savannah River Basin streams in Clay County. In Georgia, it inhabits Hiwassee River Basin drainages in Gilber, Habersham, Lumpkin, Rabun, Towns, Union, and White Counties. Thus, it is possible that this species occurs in the Hiwassee drainage in Clay and Cherokee counties. It is primarily an aquatic salamander, similar to its larger congener and closely related species, the Black-bellied Salamander (*D. quadramaculatus*) occupying habitat that consists of clear, high velocity, mountain streams and rarely ventures far from the stream bank. The map below was generated by staff. As a relatively newly described species (2002), NatureServe has not yet caught up with its distribution, and the NatureServe map is not accurate.



NCWRC Species Listing Abstract



Rationale for Listing

This species is only known in North Carolina from one small drainage of the Savannah River. The extremely limited known area of occupancy supports a listing of Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Gopher Frog
Rana [=Lithobates] capito
Current N.C. Status: Threatened
Proposed N.C. Status: Endangered

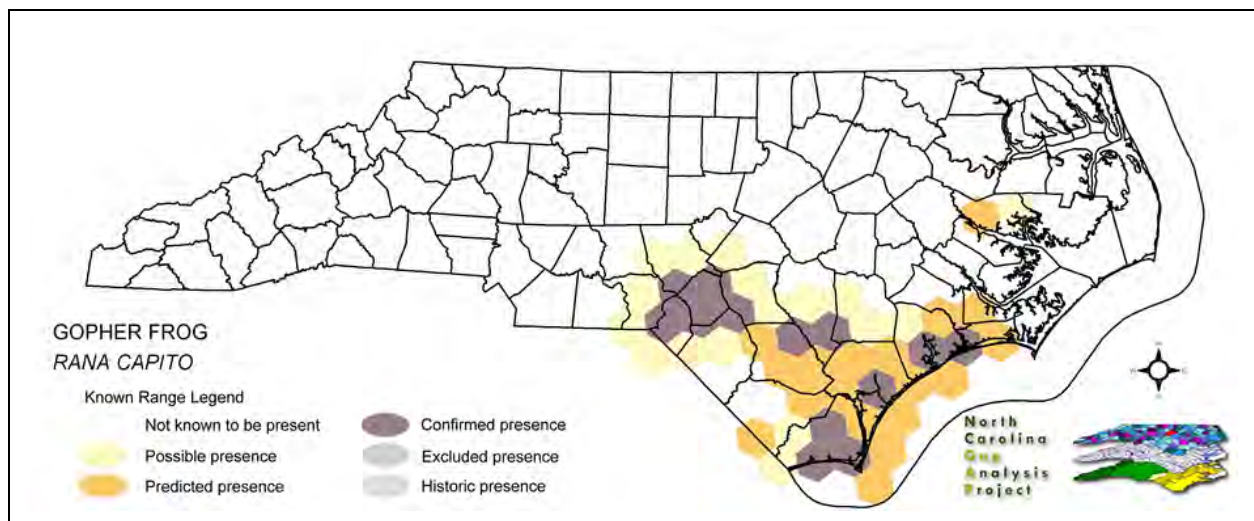


Status

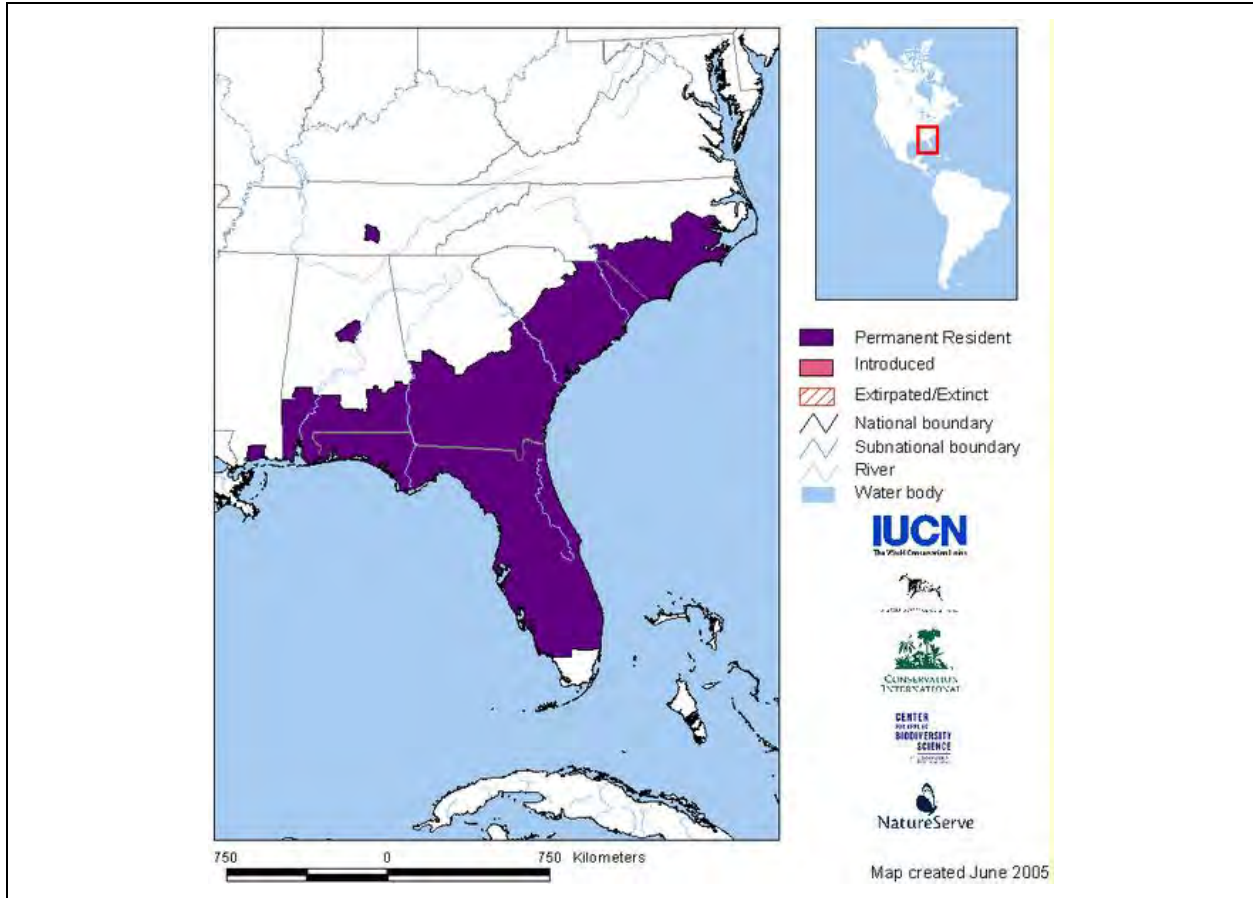
Federal	Not listed; under review for listing; petitioned in 2012; finding of substantial evidence for listing in 2015
Virginia	Not listed
Tennessee	Not listed
Georgia	Rare
South Carolina	Endangered
NatureServe	Vulnerable
IUCN	Near Threatened

Range

The historic Gopher Frog range extends from southeastern Louisiana along the Gulf Coast to southern Florida and along the Atlantic coast northward to southeastern North Carolina. In North Carolina, the species is currently found scattered around the Sandhills and southeastern Coastal Plain. The NC GAP map shown below includes many historical locations which are no longer viable.



NCWRC Species Listing Abstract



Rationale for Listing

The Gopher Frog is associated with critically endangered and highly fragmented Longleaf Pine ecosystems, and ponds of very specific hydrological conditions in the southeastern United States. Of the original 23 historical populations, only 7 remain (70% reduction). Furthermore, lost populations are not likely to be recoverable. Remaining populations face numerous threats including severe weather, especially long periods of drought, development, and lack of proper management.

State Species Assessment Protocol Results

Criterion	Score
A	Threatened
B	Threatened
C	Endangered
D	Threatened
Overall	Endangered

NCWRC Species Listing Abstract

Species Name: Gray Treefrog
Hyla versicolor
Current N.C. Status: Not Listed
Proposed N.C. Status: Special Concern

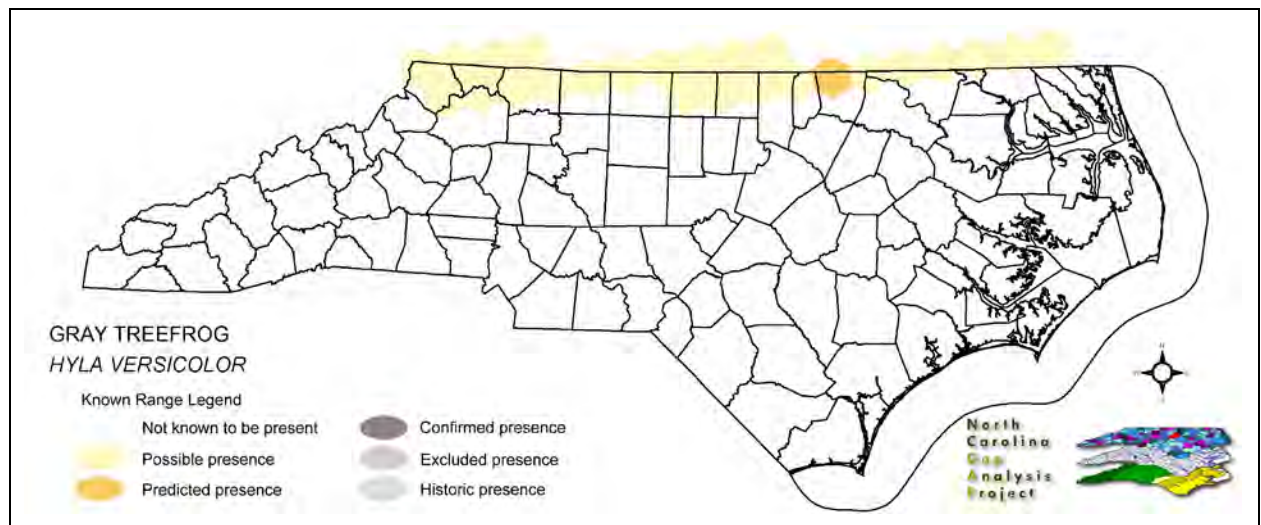


Status

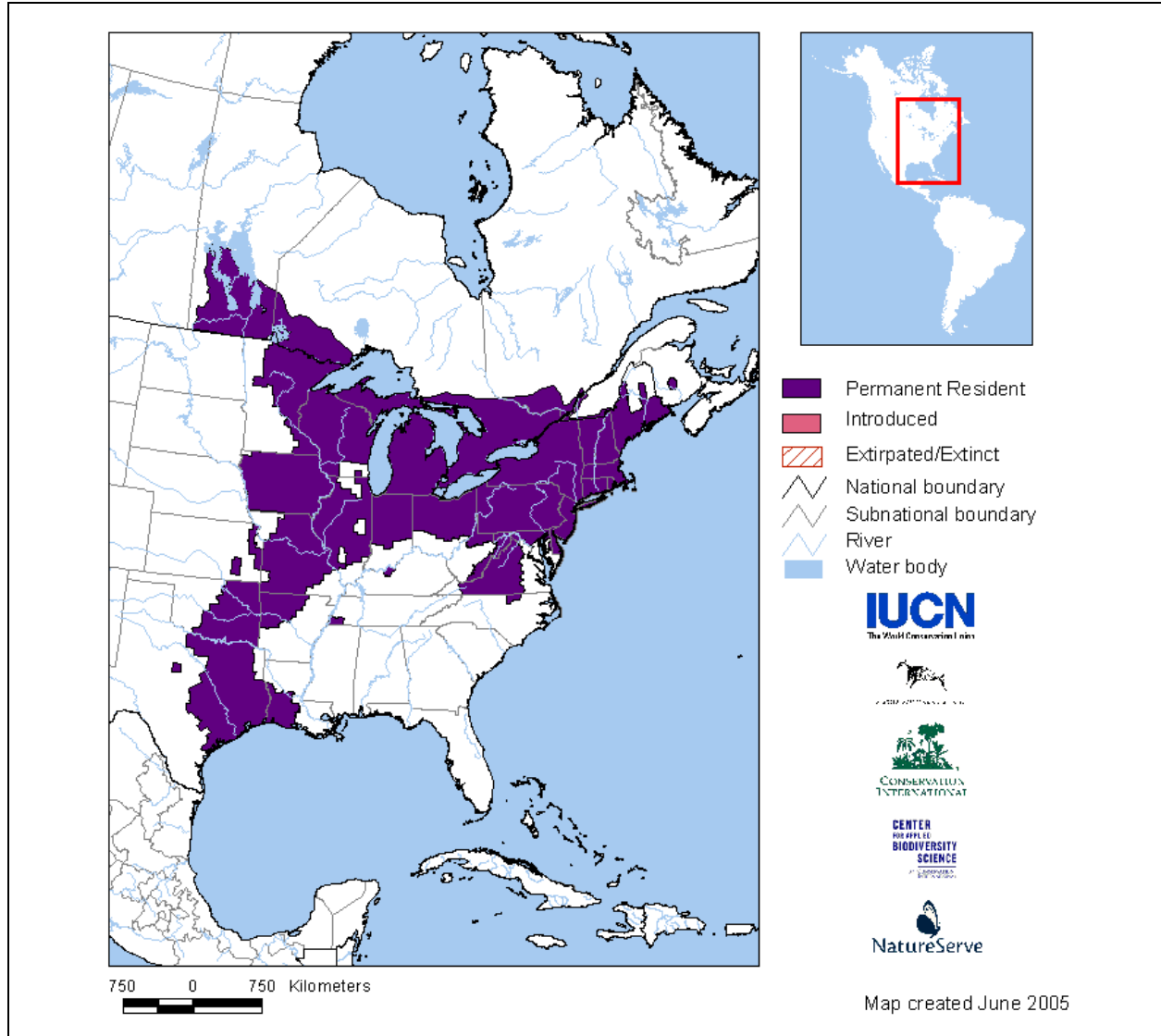
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	N/A
South Carolina	N/A
NatureServe	Secure
IUCN	Least Concern

Range

This species is widespread throughout much of the eastern United States and Canada. However, in North Carolina it is only known from several counties in the northern and central Piedmont. The Gray Treefrog overlaps with the range of Cope's Gray Treefrog (*Hyla chrysoscelis*) and can only be differentiated by its call or using genetic techniques.



NCWRC Species Listing Abstract



Rationale for Listing

Due to its very limited range in North Carolina, the Gray Treefrog warrants a listing of Species of Special Concern. Further information is needed about distribution, population status, and threats to the species in North Carolina.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Special Concern
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Green Salamander

Aneides aeneus

Current N.C. Status: Endangered

Proposed N.C. Status: Threatened

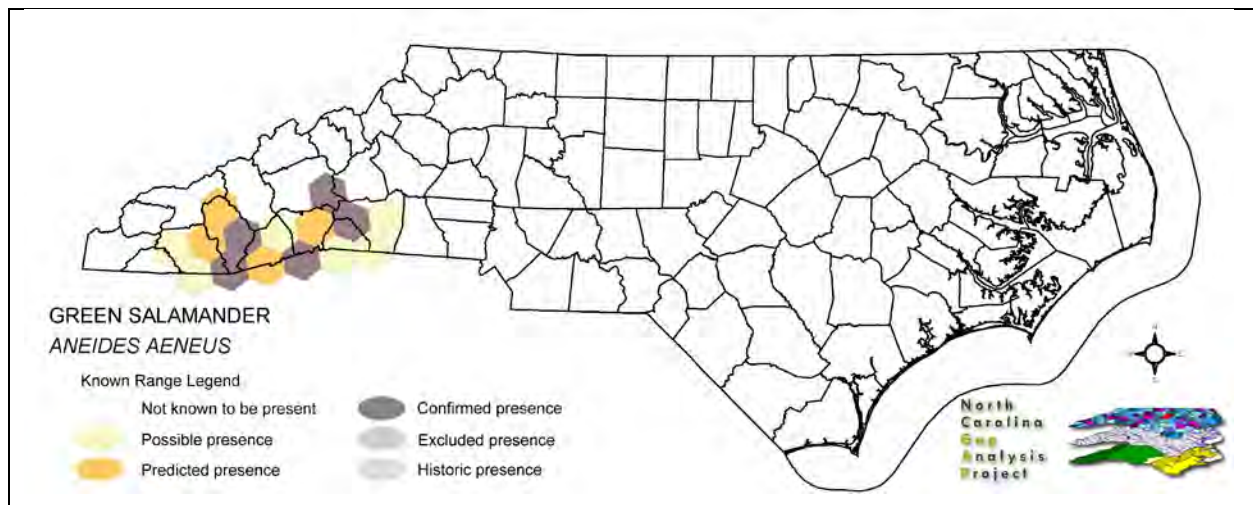


Status

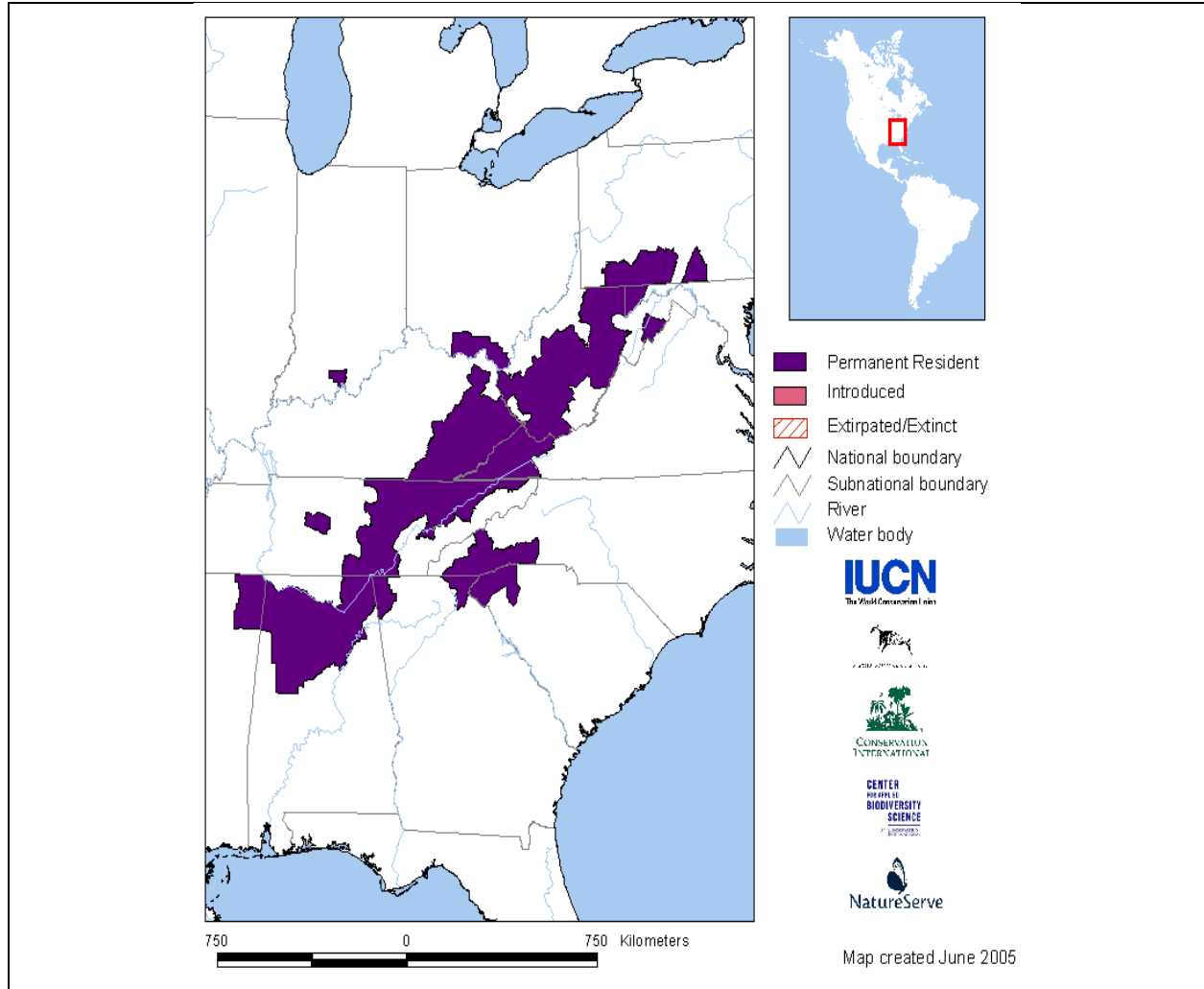
Federal	Not listed; under review for listing; petitioned in 2012; finding of substantial evidence for listing in 2015
Virginia	Not listed
Tennessee	Not listed
Georgia	Rare
South Carolina	Not listed
NatureServe	Global – Vulnerable; State – Imperiled
IUCN	Near Threatened

Range

The primary range of the species extends from northern Mississippi, northern Alabama, Tennessee, Kentucky, West Virginia, southern Ohio, and into southern Pennsylvania. Disjunct portions of the range occur largely in North Carolina, South Carolina, and Georgia as well as smaller ones in southern Indiana, western Maryland, and middle Tennessee. Recent genetic research indicates that there may be separate species in North Carolina; one occurs in Hickory Nut Gorge area and the other along the Blue Ridge escarpment, which is continuous with populations in South Carolina and Georgia. Additional locations have been confirmed in Henderson and Transylvania Counties that are not reflected in the map below.



NCWRC Species Listing Abstract



Rationale for Listing

Through extensive annual monitoring and research conducted by the Wildlife Commission, populations in North Carolina have recovered from a population crash from the 1970s to 1990s. Although this information, along with WRC efforts to protect habitat through conservation efforts on public and private lands throughout the state, indicates stabilization of populations, threats, such as exposure from canopy removal, illegal collection, and disease, to the species and its habitat remain.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Threatened
C	Data Deficient
D	Special Concern
Overall	Threatened

NCWRC Species Listing Abstract

Species Name: Mabee’s Salamander

Ambystoma mabeei

Current N.C. Status: Not Listed

Proposed N.C. Status: Threatened

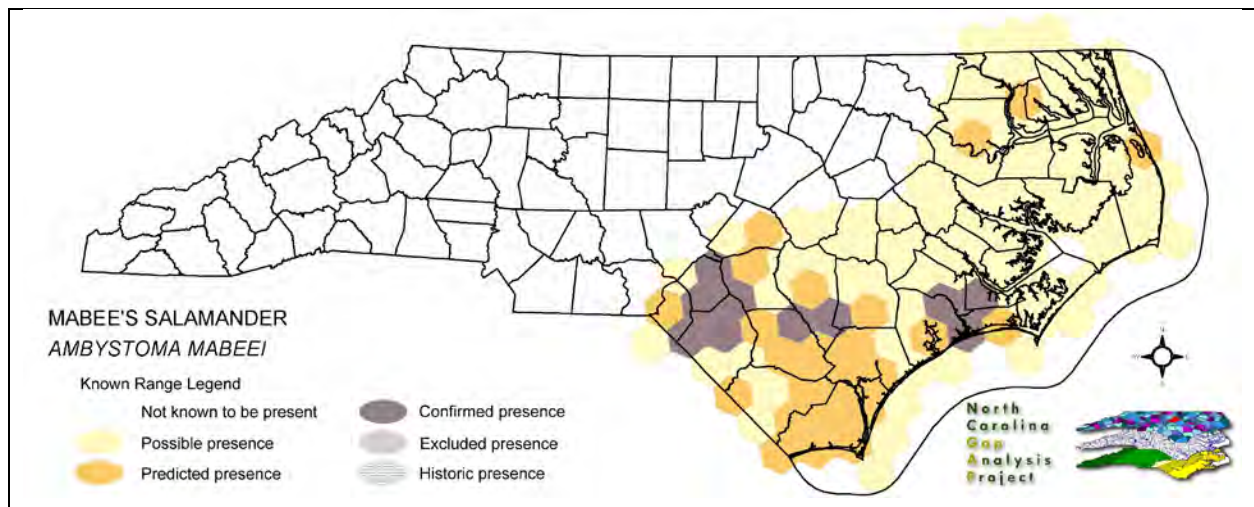


Status

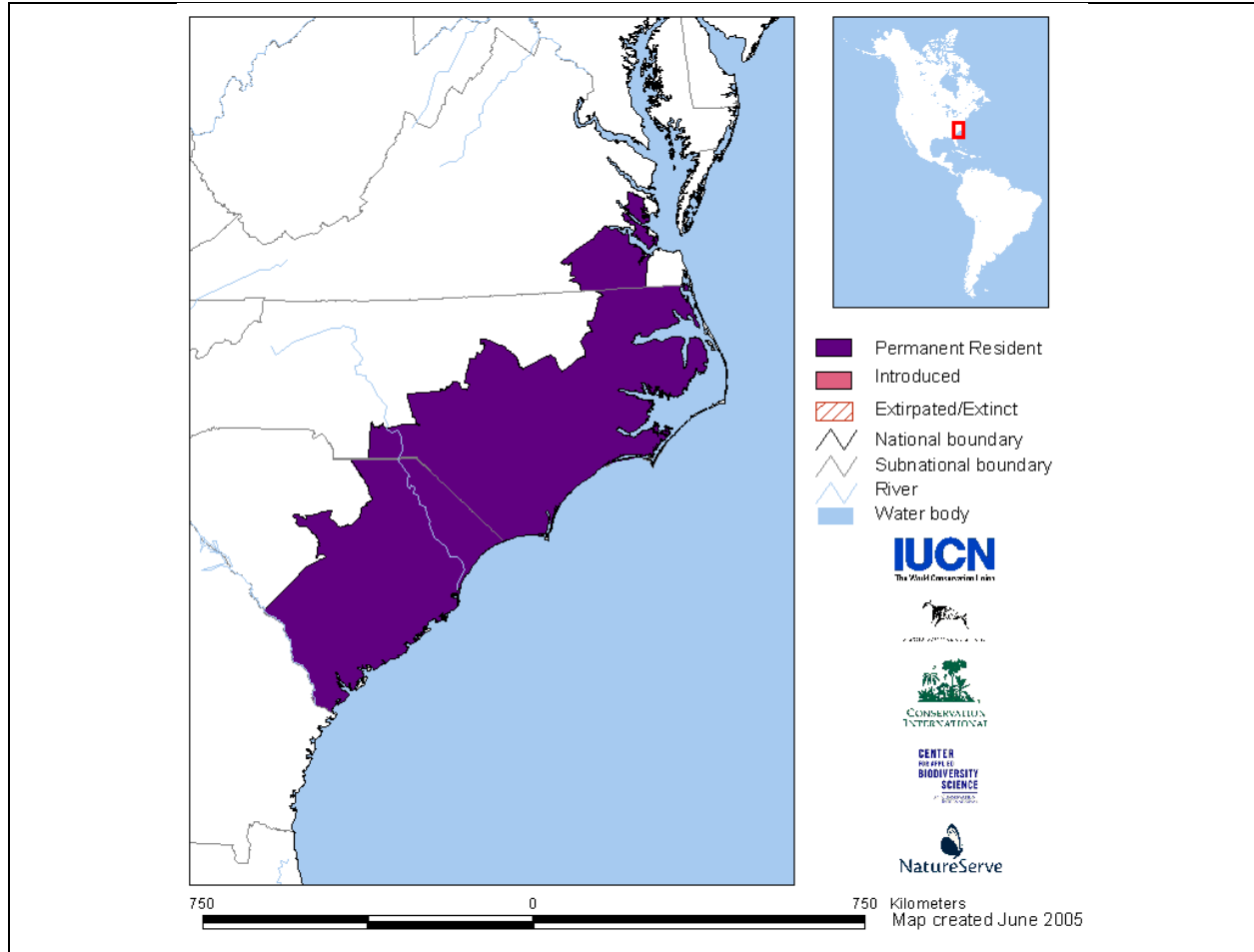
Federal	Not listed
Virginia	Threatened
Tennessee	N/A
Georgia	Not listed
South Carolina	Not listed
NatureServe	Apparently Secure
IUCN	Least Concern

Range

The Mabee’s Salamander is endemic to the Atlantic Coastal Plain from southeastern Virginia to the Savannah River. A single record exists from Burke County, Georgia just south of the Savannah River. This taxon is known from ~40 localities in North Carolina, the majority of which lie within the Sandhills and lower Coastal Plain regions. Mabee’s Salamanders have been found in Brunswick, Carteret, Columbus, Hoke, New Hanover, Perquimans, Pitt, Robeson, and Scotland counties. Ecological niche modeling suggests that high quality habitat extends from southern coastal counties in North Carolina north to Carteret County.



NCWRC Species Listing Abstract



Rationale for Listing

The Mabee's Salamander breeds in intermittent pools and ditches. Juveniles and adults use terrestrial habitats including: open fields, pine forests, and hardwood forests. This species is heavily reliant on ephemeral wetlands that are free of fish. Although historically found across much of the NC Coastal Plain, the Mabee's Salamander has suffered a severe decline in area of occupancy, found now at less than 50% of historical sites. This reduction in occupancy supports a listing of Threatened. Remaining populations face numerous threats including road mortality, development, and severe weather, especially long periods of drought.

State Species Assessment Protocol Results

Criterion	Score
A	Threatened
B	Special Concern
C	Data Deficient
D	Special Concern
Overall	Threatened

NCWRC Species Listing Abstract

Species Name: Ornate Chorus Frog

Pseudacris ornata

Current N.C. Status: Not Listed

Proposed N.C. Status: Endangered

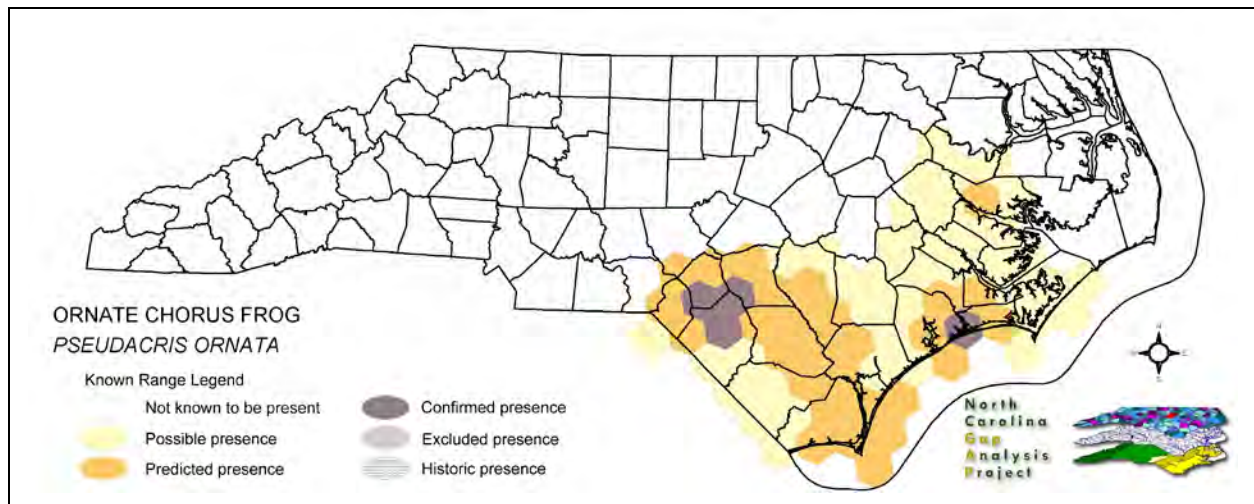


Status

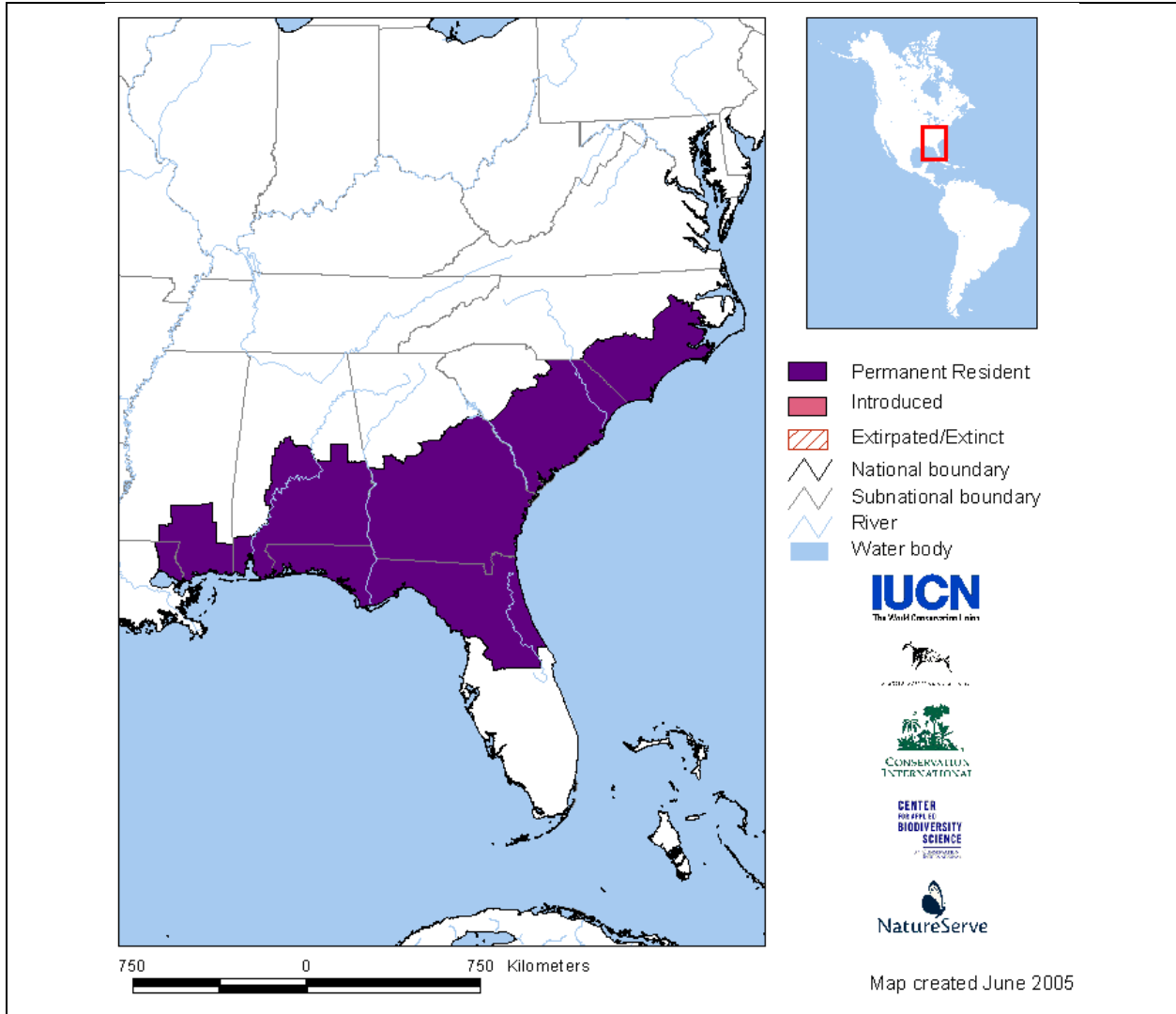
Federal	Not listed
Virginia	N/A
Tennessee	N/A
Georgia	Not listed
South Carolina	Not listed
NatureServe	Apparently Secure
IUCN	Least Concern

Range

Nationally, the Ornate Chorus Frog occurs in the southeastern Coastal Plain, from southeastern North Carolina to Florida and west to Louisiana. In North Carolina, Ornate Chorus Frogs were known from 39 sites historically (breeding ponds and/or road killed individuals). Extensive surveys from 2010 to present indicate that of those 39 sites, 9 are still believed to be extant (77% decline). During recent surveys, some new breeding ponds have been discovered (mainly on Camp Lejeune), but no new populations have been discovered.



NCWRC Species Listing Abstract



Rationale for Listing

This species inhabits high-quality, well managed pine habitats on the Coastal Plain and requires high quality isolated wetlands for breeding. Much of this type of habitat has been lost to development or poor management. Because of drastic declines in populations over the last several decades and few remaining occupied sites, this species warrants a listing of Endangered.

State Species Assessment Protocol Results

Criterion	Score
A	Endangered
B	Data Deficient
C	Data Deficient
D	Data Deficient
Overall	Endangered

NCWRC Species Listing Abstract

Species Name: River Frog

Rana [=Lithobates] heckscheri

Current N.C. Status: Special Concern

Proposed N.C. Status: Endangered

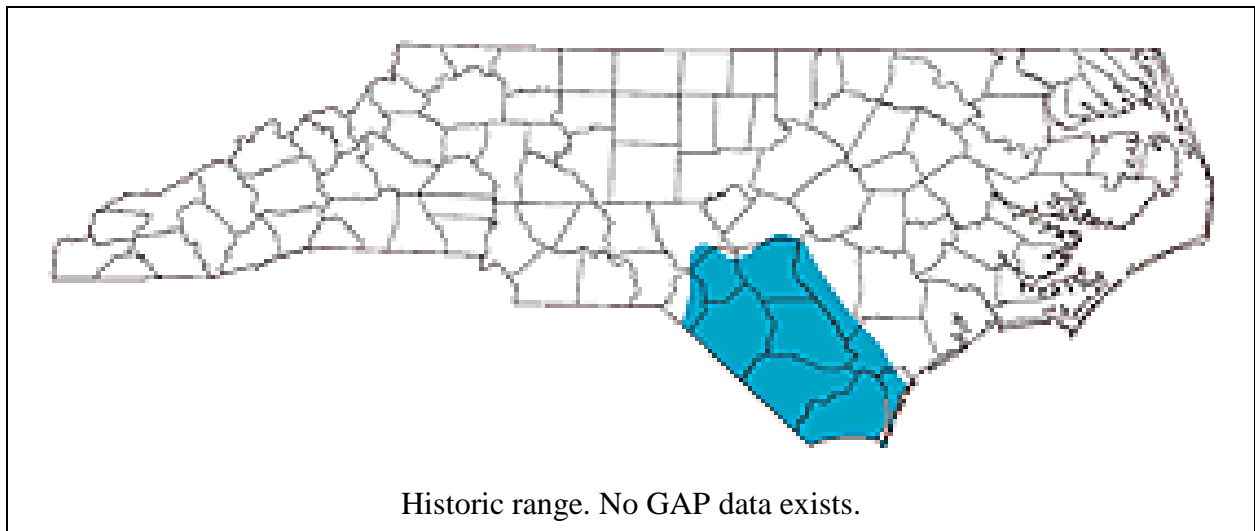


Status

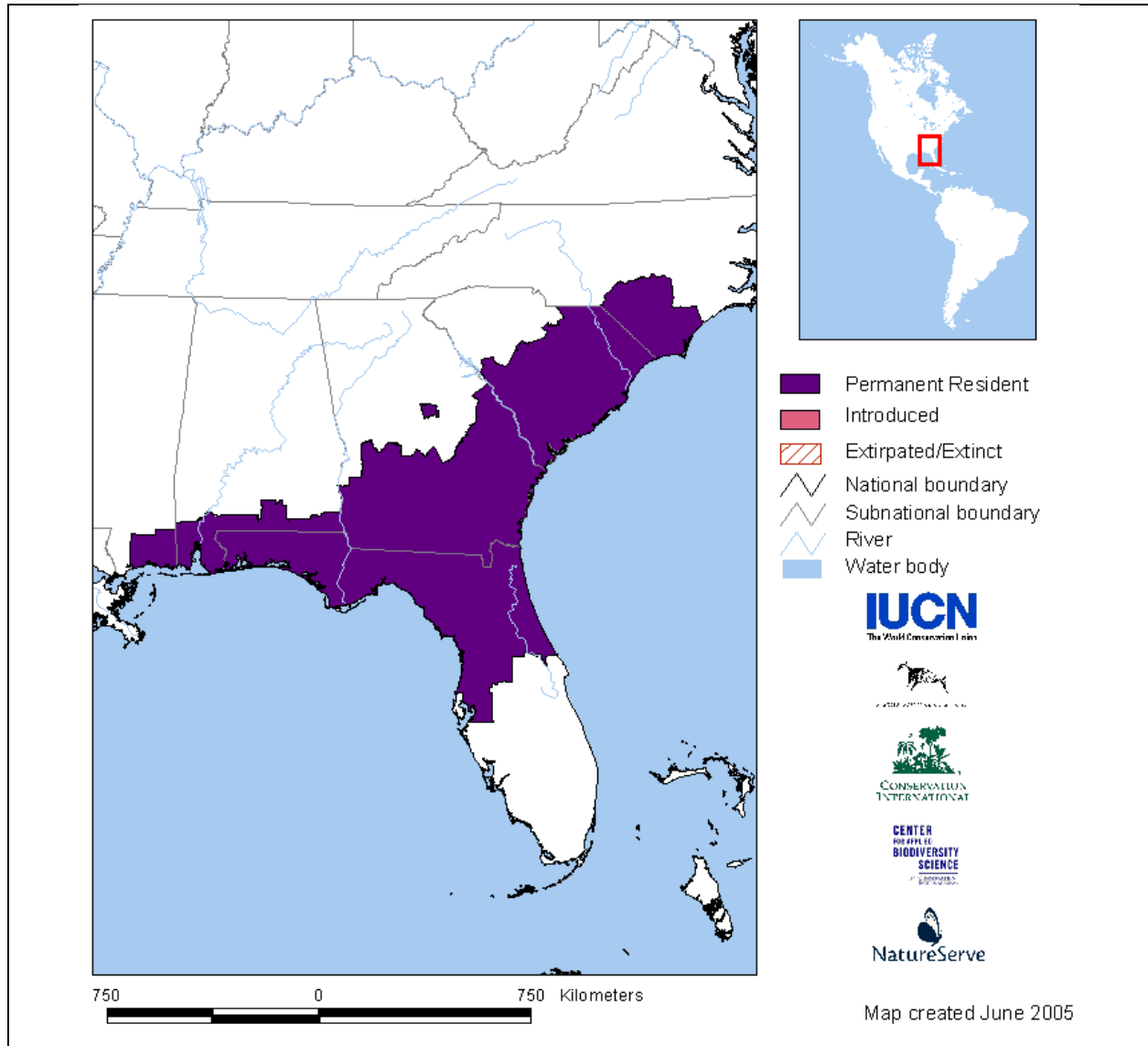
Federal	Not listed
Virginia	N/A
Tennessee	N/A
Georgia	Not listed
South Carolina	Not listed
NatureServe	Secure
IUCN	Least Concern

Range

Nationally, the River Frog historically ranged from southeastern North Carolina, south to Florida, and west to Mississippi. Three sites were historically known to be occupied in North Carolina, however the species has not been documented in the state since 1975. Despite extensive surveys conducted recently, no recent specimens of this species have been documented.



NCWRC Species Listing Abstract



Rationale for Listing

River Frogs once occurred at several sites in North Carolina, however the species has not been documented in the state since 1975. Because the species has not been detected in North Carolina in recent years, despite targeted surveys, the River Frog warrants a listing of Endangered.

State Species Assessment Protocol Results

Criterion	Score
A	Endangered
B	Endangered
C	Endangered
D	Endangered
Overall	Endangered

NCWRC Species Listing Abstract

Species Name: Barn Owl
Tyto alba

Current N.C. Status: Not Listed

Proposed N.C. Status: Special Concern

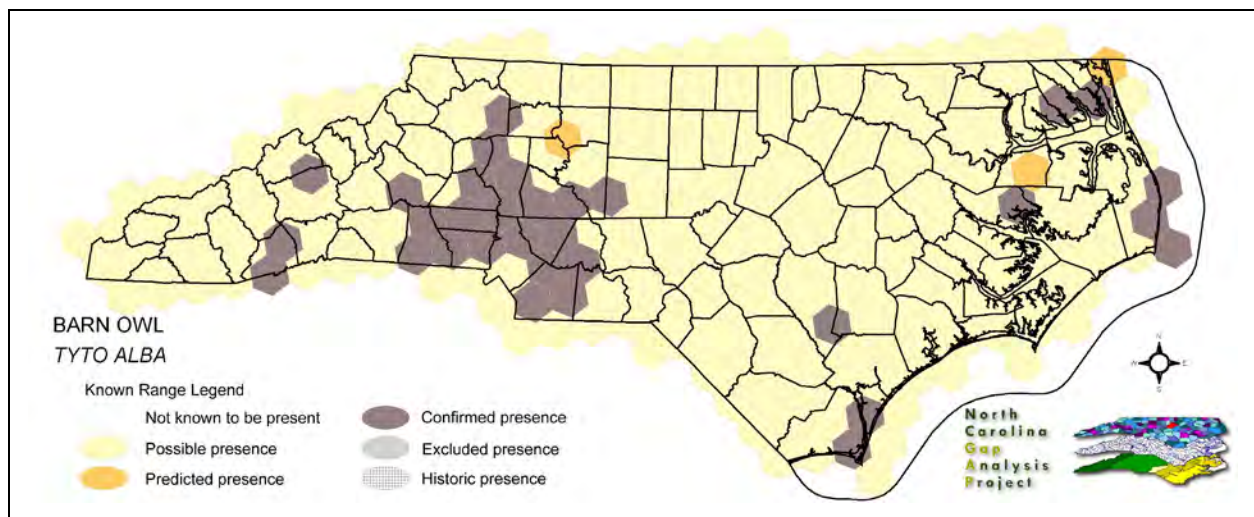


Status

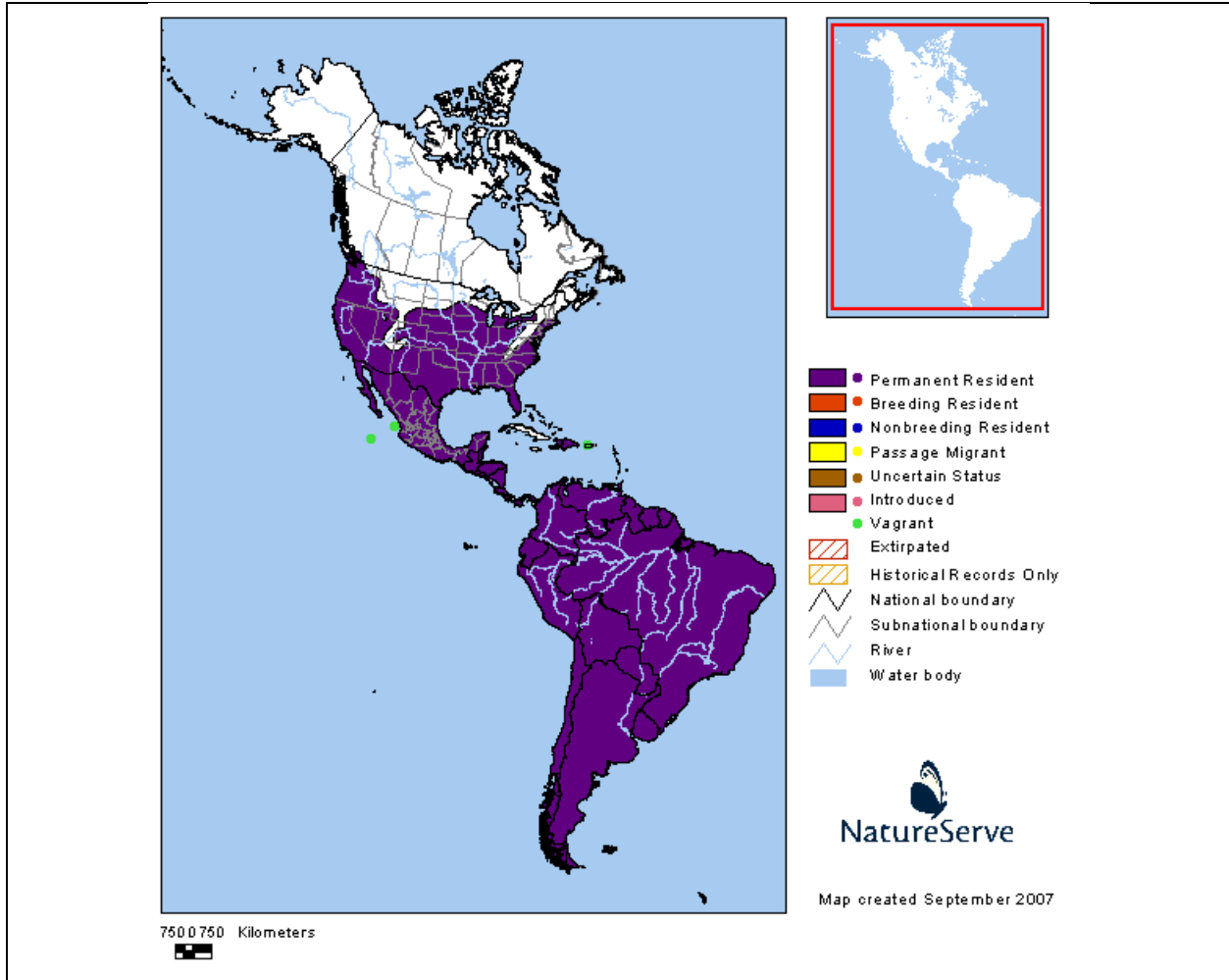
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Secure State – Imperiled; Vulnerable during breeding and non-breeding seasons
IUCN	Least Concern

Range

Breeding range is worldwide, but occurrence within its range is highly variable and spotty. Occurrence in North Carolina is associated with open grasslands and agricultural areas.



NCWRC Species Listing Abstract



Rationale for Listing

The nocturnal habits of this species make population estimates, population trend, and range difficult to accurately quantify. However, urban/suburban development and changes in agricultural practices have resulted in a significant decline in nesting locations (traditionally man-made structures such as barns and silos) and habitat for its prey (primarily meadow voles; agricultural fields and open grasslands). Estimates indicate a 28-48% decline in Extent of Occurrence in the North Carolina (criterion A), and population estimates in the state are at 788 individuals (criterion D).

State Species Assessment Protocol Results

Criterion	Score
A	Special Concern
B	Least Concern
C	Data Deficient
D	Special Concern
Regional	No Change
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Caspian Tern
Hydroprogne caspia

Current N.C. Status: Not Listed
Proposed N.C. Status: Threatened



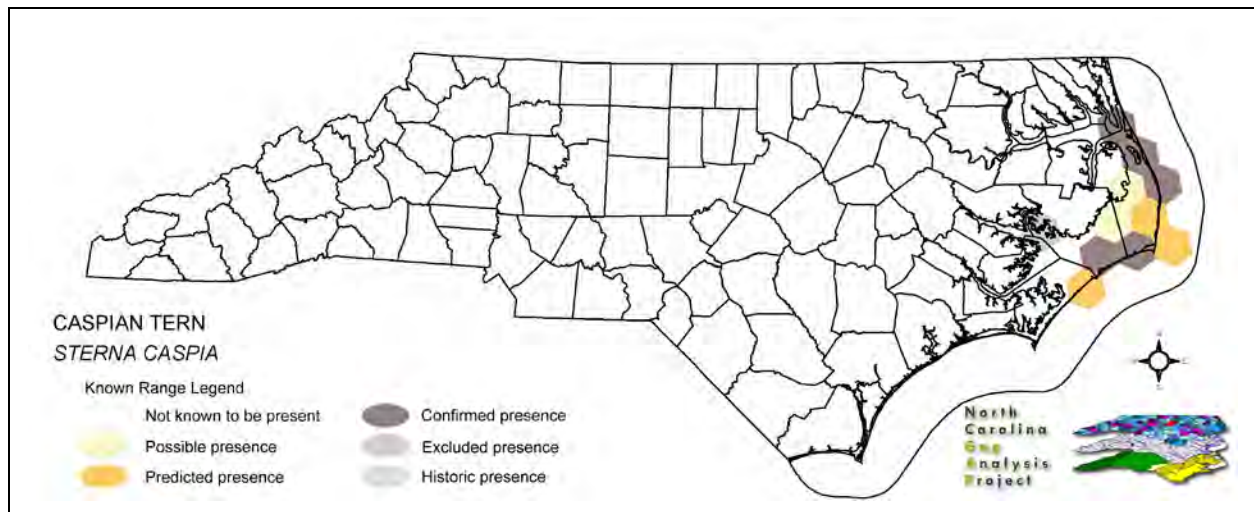
© Dennis Donohue

Status

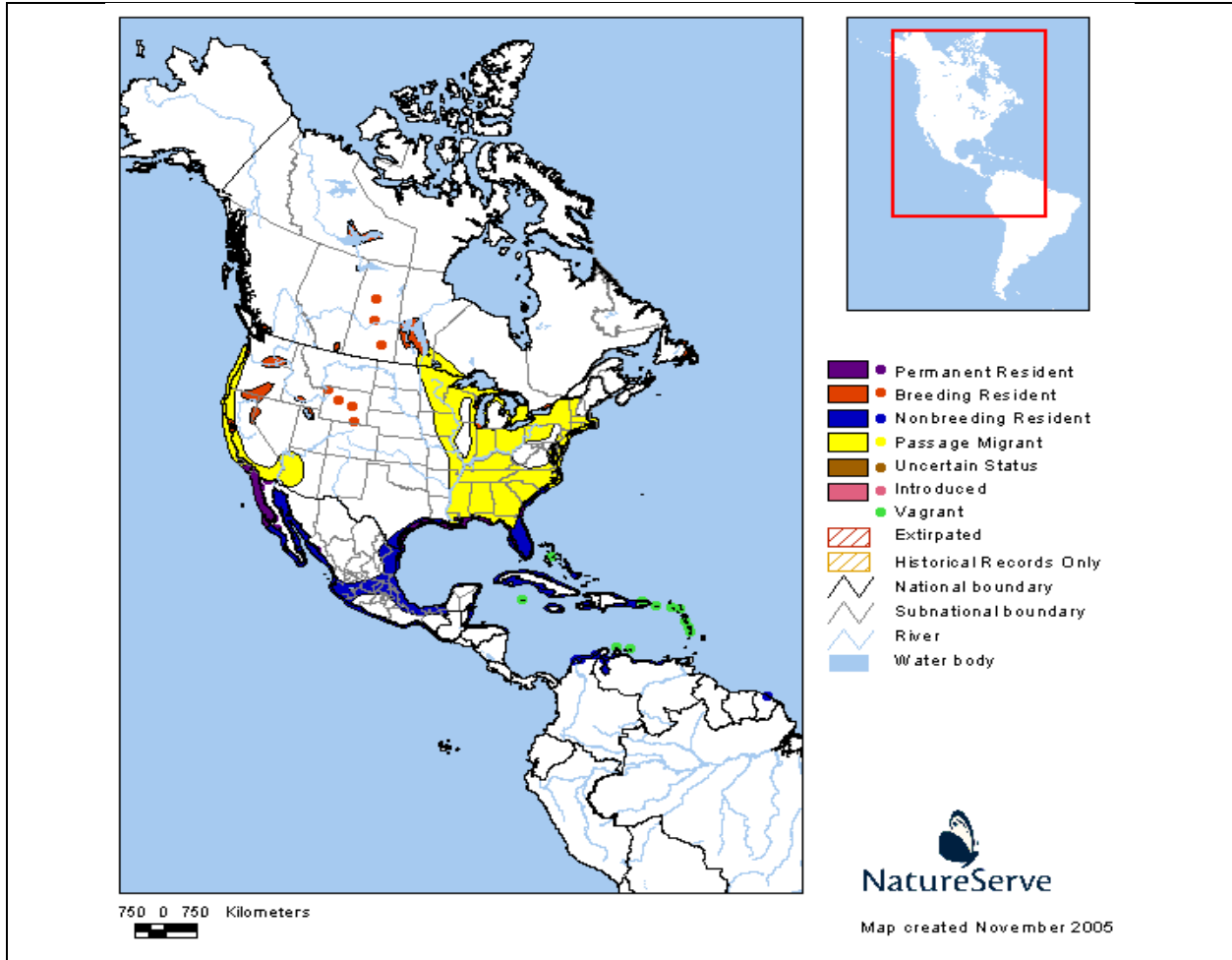
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Secure; State – Imperiled
IUCN	Least Concern

Range

The North Carolina Gap Analysis Project map shows the likely presence of the Caspian Tern in the state. It only occurs on the coast, specifically using dredged-material islands in the Pamlico Sound near Oregon Inlet for nesting and other coastal shorelines for roosting. The NatureServe map of its North American range shows nesting colonies in the western U.S. (California, Oregon, Washington), central U.S. (Wyoming), Great Lakes region (Illinois, Wisconsin), and Canadian Provinces. Its migration follows the Pacific and Atlantic Flyways to Central America, South America, and the Caribbean. The breeding population in North Carolina is small and declining, and that in other locations on the Atlantic Coast is small and localized (Virginia, South Carolina, Georgia, Florida). Additional small, localized breeding colonies are recorded on the Gulf Coast (Florida, Alabama, Mississippi, Louisiana, Texas).



NCWRC Species Listing Abstract



Rationale for Listing

In North Carolina, the distribution of the Caspian Tern nesting population has declined from three dredged-material islands to one in recent years. The number of nesting pairs peaked at 37 in 1995, then declined each of the next five census years. There were 15 nesting pairs in 2014, the most recent census year, slightly below the 11-year average (18 ± 3.5 pairs) (criterion D). Thus, the decline in number of nesting pairs and colony sites is of concern to the continued viability of this population in North Carolina. Further, all nesting colonies have been on dredged-material islands since 1977 and the ability of the NCWRC to manage these islands properly for this and other tern species is greatly dependent on dredging operations of our partner, the U.S. Army Corps of Engineers.

State Species Assessment Protocol Results

Criterion	Score
A	Threatened
B	Threatened
C	Threatened
D	Endangered
Regional	Downlist
Overall	Threatened

NCWRC Species Listing Abstract

Species Name: Common Tern
Sterna hirundo

Current N.C. Status: Special Concern
Proposed N.C. Status: Endangered

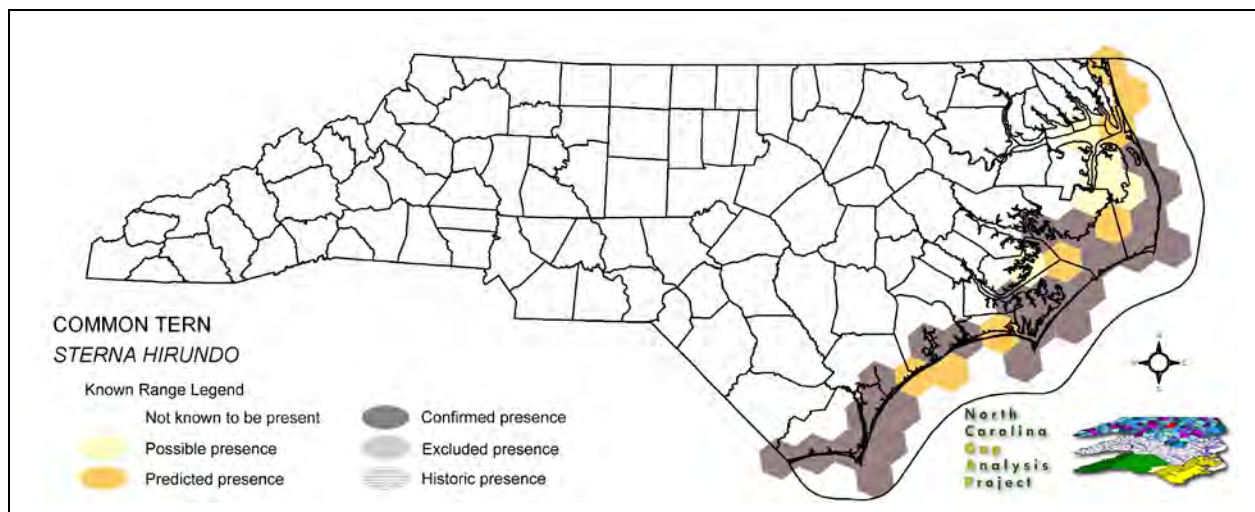


Status

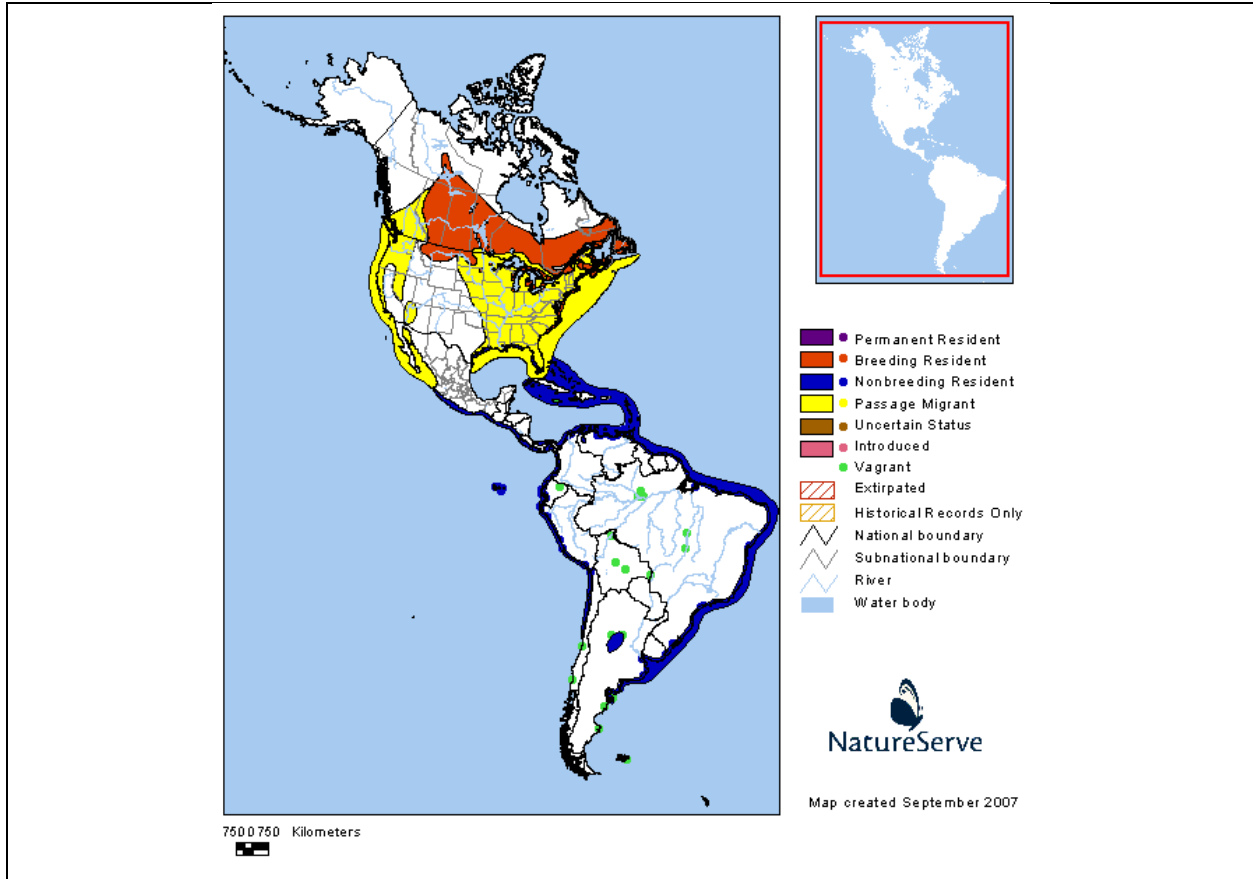
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Secure; State – Imperiled
IUCN	Least Concern

Range

The Common Tern is found on seacoasts, estuaries, bays, sounds, lakes, rivers, and marshes. It nests on island beaches of sand, shells, and pebbles, with low percentage of vegetation cover. It will nest on man-made islands with appropriate substrate and vegetation cover. In North Carolina, it nests on coastal barrier islands, and natural and man-made islands in large sounds and rivers. Elsewhere in North America, it nests on riverine islands, undisturbed lake shorelines, and coastal habitats of the Atlantic and Gulf coasts. The number of nesting pairs has declined in its southern range.



NCWRC Species Listing Abstract



Rationale for Listing

The nesting population of the Common Tern in North Carolina has declined by 72% (12 census years) from 1977 to 2014 (criterion A). Current breeding population estimate in the state is 581 individuals (criterion C). Beach sites on which it nests are increasingly affected by development of homes and businesses, coastal engineering projects (beach excavation and nourishment; hardened structures), recreational activities, predators, erosion and subsidence, and increased vegetation cover. Since the late 1970s, increased fishing activities may have reduced forage fish abundance and availability to the Common Tern. Nesting populations of the Common Tern in adjacent states are of great concern due to small sizes and declining trends; hence, it is unlikely that the nesting population in North Carolina would benefit from immigration from those nesting populations.

State Species Assessment Protocol Results

Criterion	Score
A	Endangered
B	Special Concern
C	Endangered
D	Threatened
Regional	No Change
Overall	Endangered

NCWRC Species Listing Abstract

Species Name: Henslow's Sparrow
Ammodramus henslowii

Current N.C. Status: Not Listed

Proposed N.C. Status: Endangered



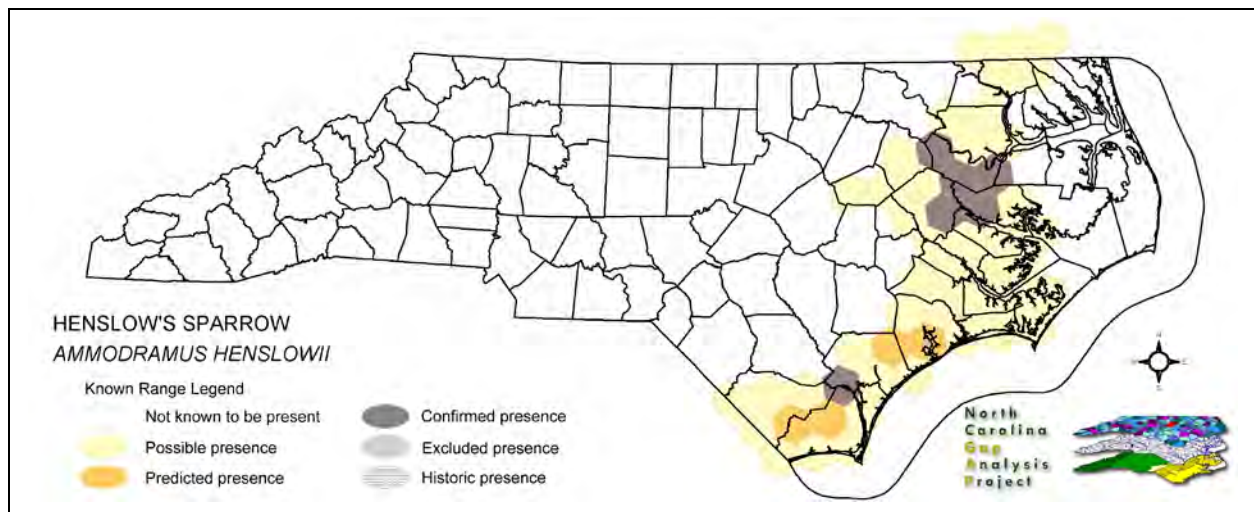
Photo by Daniel Belm

Status

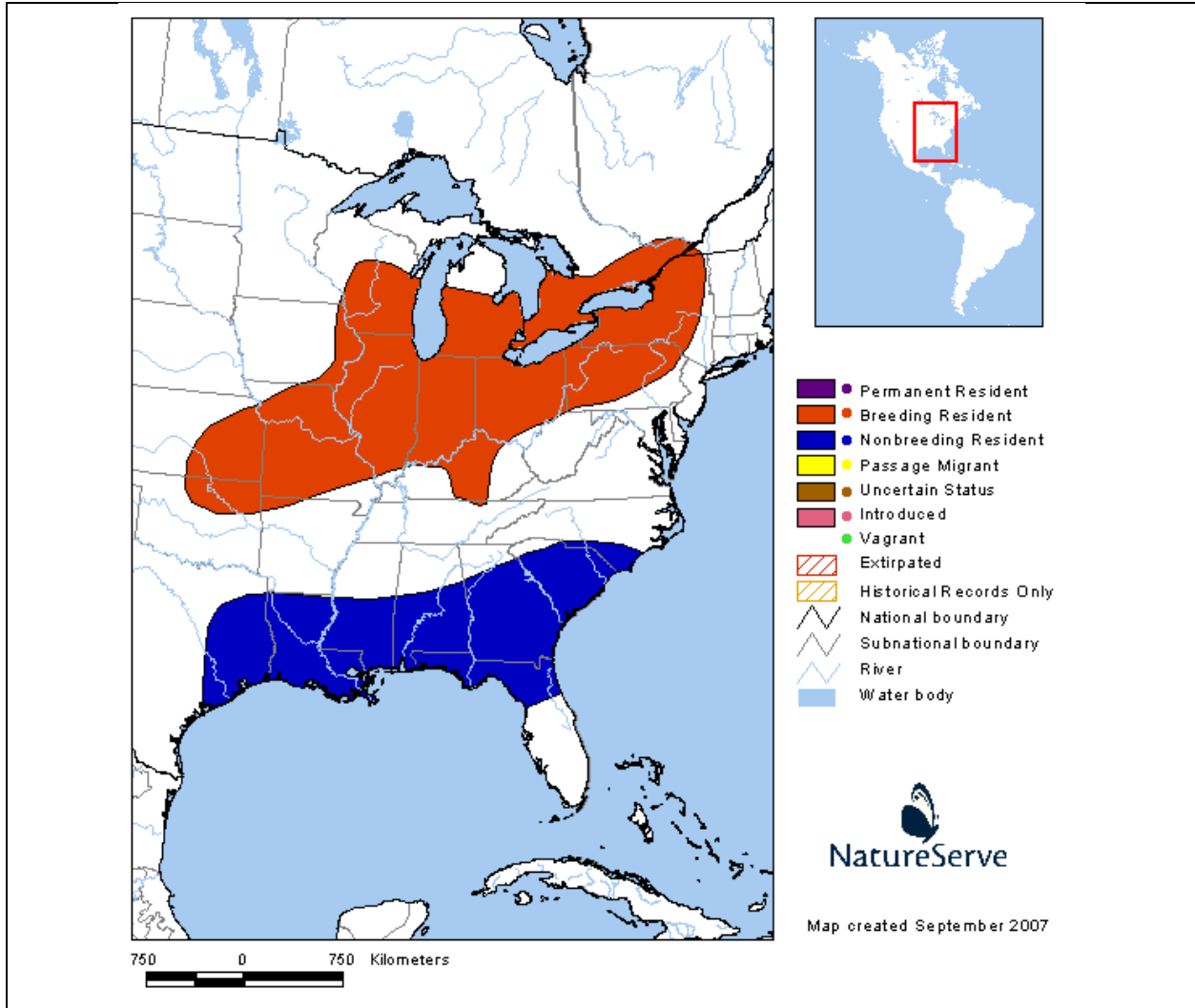
Federal	Not listed
Virginia	Threatened
Tennessee	Not listed
Georgia	Rare
South Carolina	Not listed
NatureServe	Global – Apparently Secure; State – Imperiled
IUCN	Near Threatened

Range

Breeding range extends from northeastern Oklahoma and eastern Kansas north into Wisconsin, Michigan, southern Ontario and New York. A small subset of the range projects southward into central Kentucky. Small populations exist outside this range, including one location each in Pitt and Beaufort counties, North Carolina. Winter habitats range from southern North Carolina through the southeastern United States into central Florida and extend into eastern Texas.



NCWRC Species Listing Abstract



Rationale for Listing

There are only two locations in North Carolina where breeding occurs – each of which relies on habitat management for continued viability. One has recently been acquired by the NC Wildlife Resources Commission, and the other is currently Federal property. The extent of occurrence has been restricted 91% (criterion A). Recent surveys indicate that the breeding population estimate for North Carolina is less than 700 individuals.

State Species Assessment Protocol Results

Criterion	Score
A	Endangered
B	Special Concern
C	Threatened
D	Special Concern
Regional	No Change
Overall	Endangered

NCWRC Species Listing Abstract

Species Name: Olive-sided Flycatcher
Contopus cooperi

Current N.C. Status: Special Concern

Proposed N.C. Status: Not Listed



Status

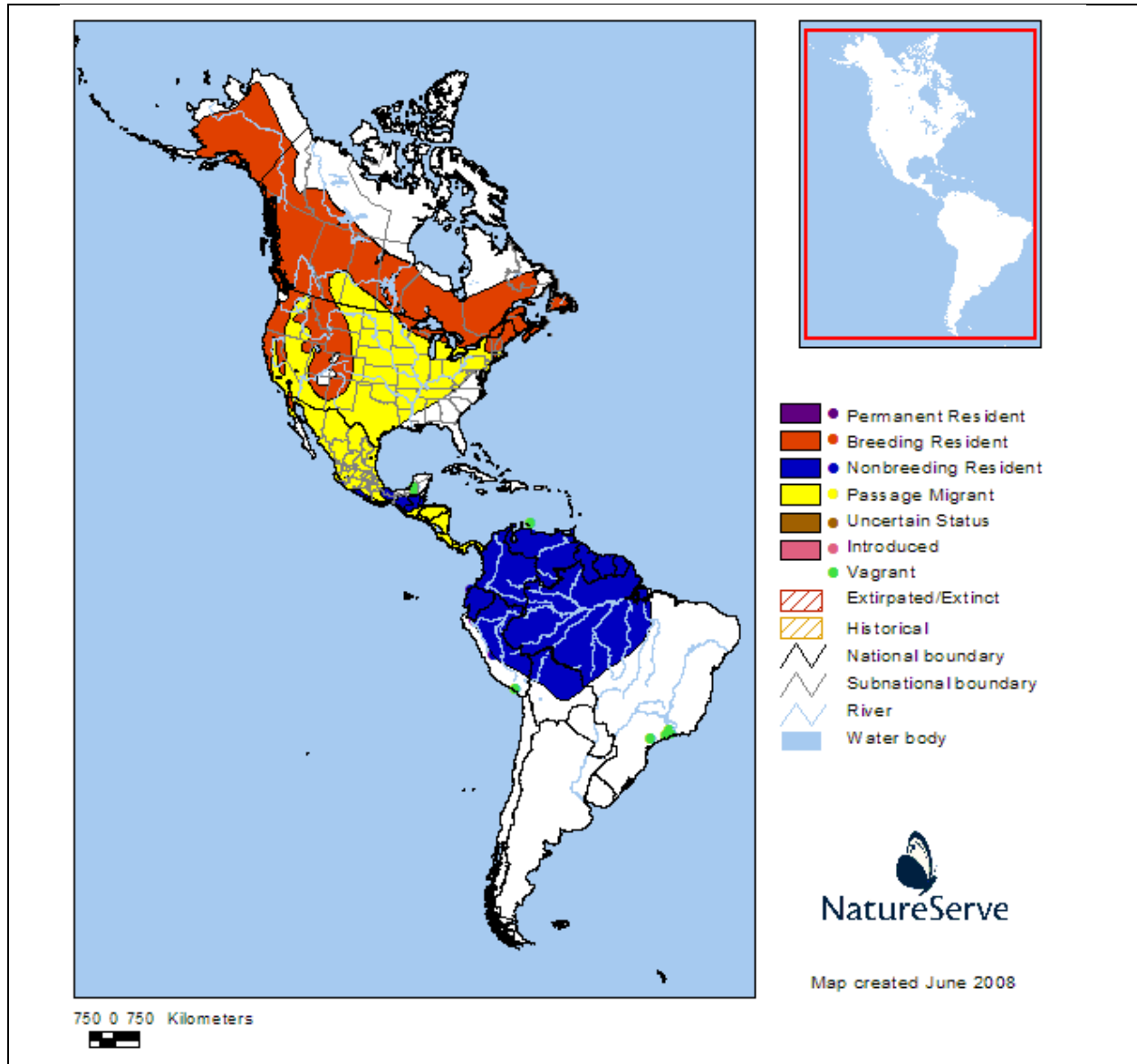
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Apparently Secure; State – Not Applicable
IUCN	Near Threatened

Range

Breeding range extends from southern Alaska and Canada, northern New England on the East Coast, California on the West Coast, and the Great Basin Region of the west-central US. There are no confirmed breeding records in North Carolina.

State Range Map Unavailable

NCWRC Species Listing Abstract



Rationale for Listing

There are no confirmed records of this species breeding in North Carolina.

State Species Assessment Protocol Results

Not evaluated using NCSAT tool. No data on breeding status in NC.

NCWRC Species Listing Abstract

Species Name: Wayne's Black-throated Green Warbler

Setophaga virens waynei

Current N.C. Status: Not Listed

Proposed N.C. Status: Endangered

Wayne's Black-throated Green Warbler is a subspecies of the Black-throated green warbler (*Setophaga virens*).

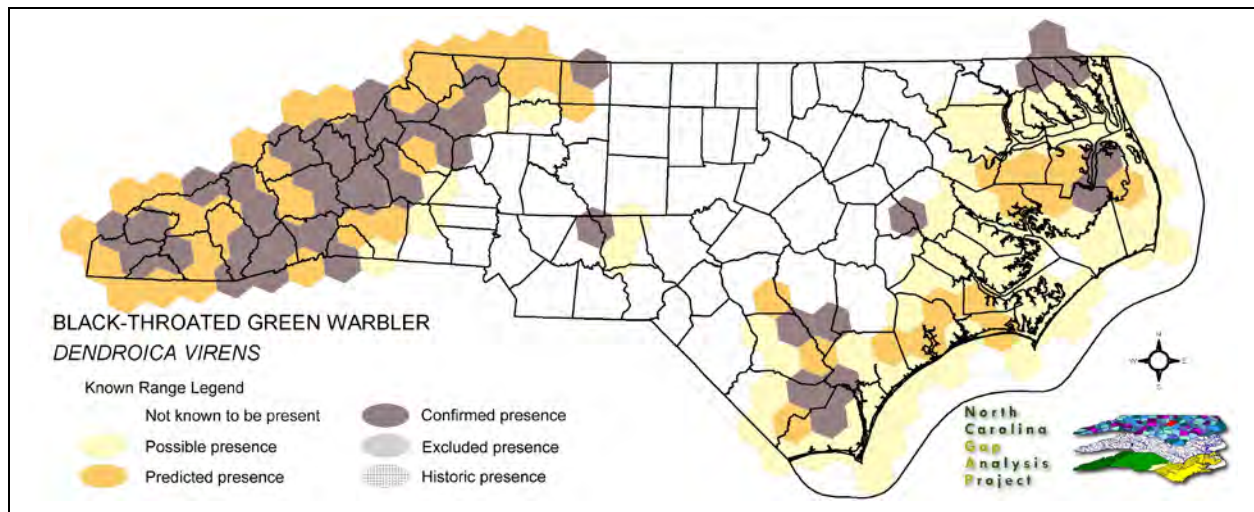


Status

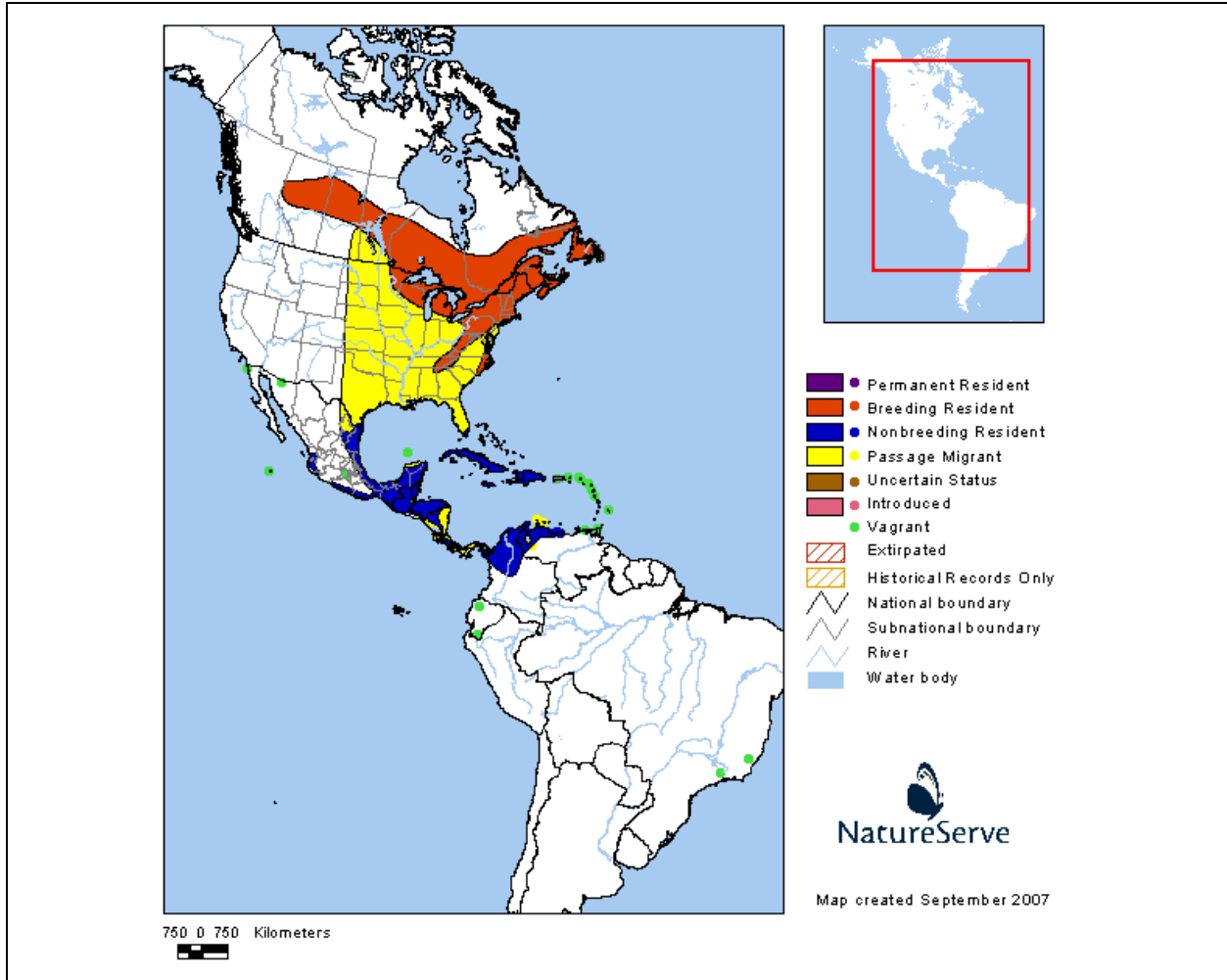
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Subspecies – Vulnerable
IUCN	Species – Least Concern; Sub-species – Not assessed

Range

Both state- and range-wide range maps below depict extent of *Setophaga virens*, which includes the much smaller range of subspecies *S. v. waynei*. The subspecies breeds only in non-riverine swamp forests of the outer Coastal plain of Virginia, North Carolina and South Carolina. In North Carolina, the subspecies is found in the counties of Beaufort, Bladen, Brunswick, Camden, Carteret, Craven, Cumberland, Dare, Gates, Hyde, Jones, Pamlico, Tyrrell and Washington.



NCWRC Species Listing Abstract



Rationale for Listing

The entire western population of the species (*Setophaga virens*) is estimated between 5,554 and 6,208 individuals, and the subspecies population is estimated to be much smaller because it is restricted to just the outer coastal plain of North Carolina along with the northern coastal plain of South Carolina and the southern coastal plain of Virginia. In addition, the breeding area of occupancy of the subspecies *S. v. waynei* has declined 85% since 1970. The total population is thought to be in decline due to the loss of Atlantic white cedar forests.

State Species Assessment Protocol Results

Criterion	Score
A	Endangered
B	Special Concern
C	Data Deficient
D	Data Deficient
Regional	No Change
Overall	Endangered

NCWRC Species Listing Abstract

Species Name: Yellow-bellied Sapsucker
Sphyrapicus varius appalachiensis

Current N.C. Status: Special Concern

Proposed N.C. Status: Not Listed

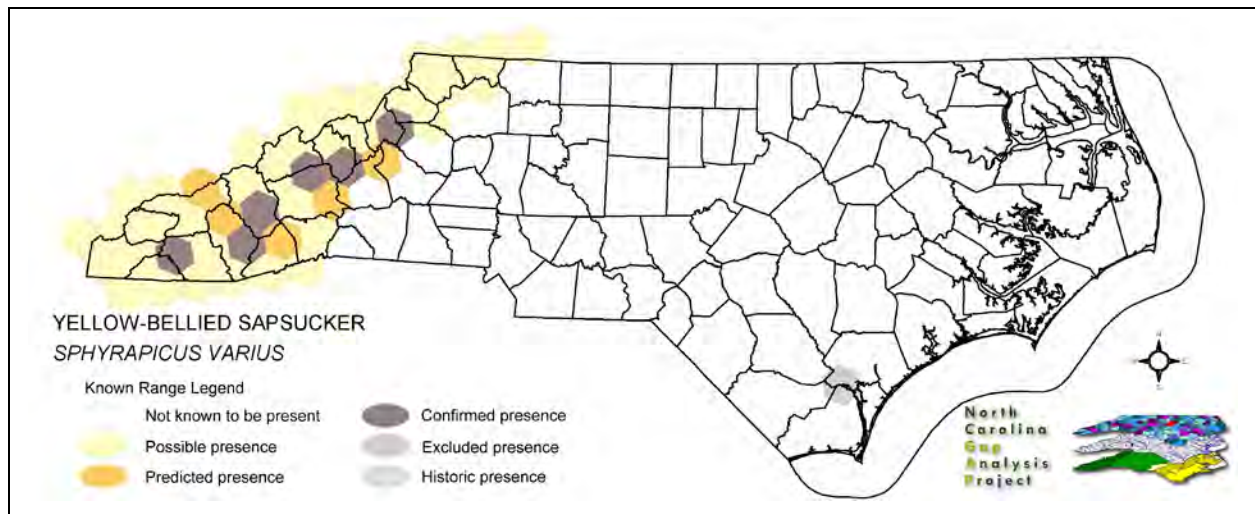


Status

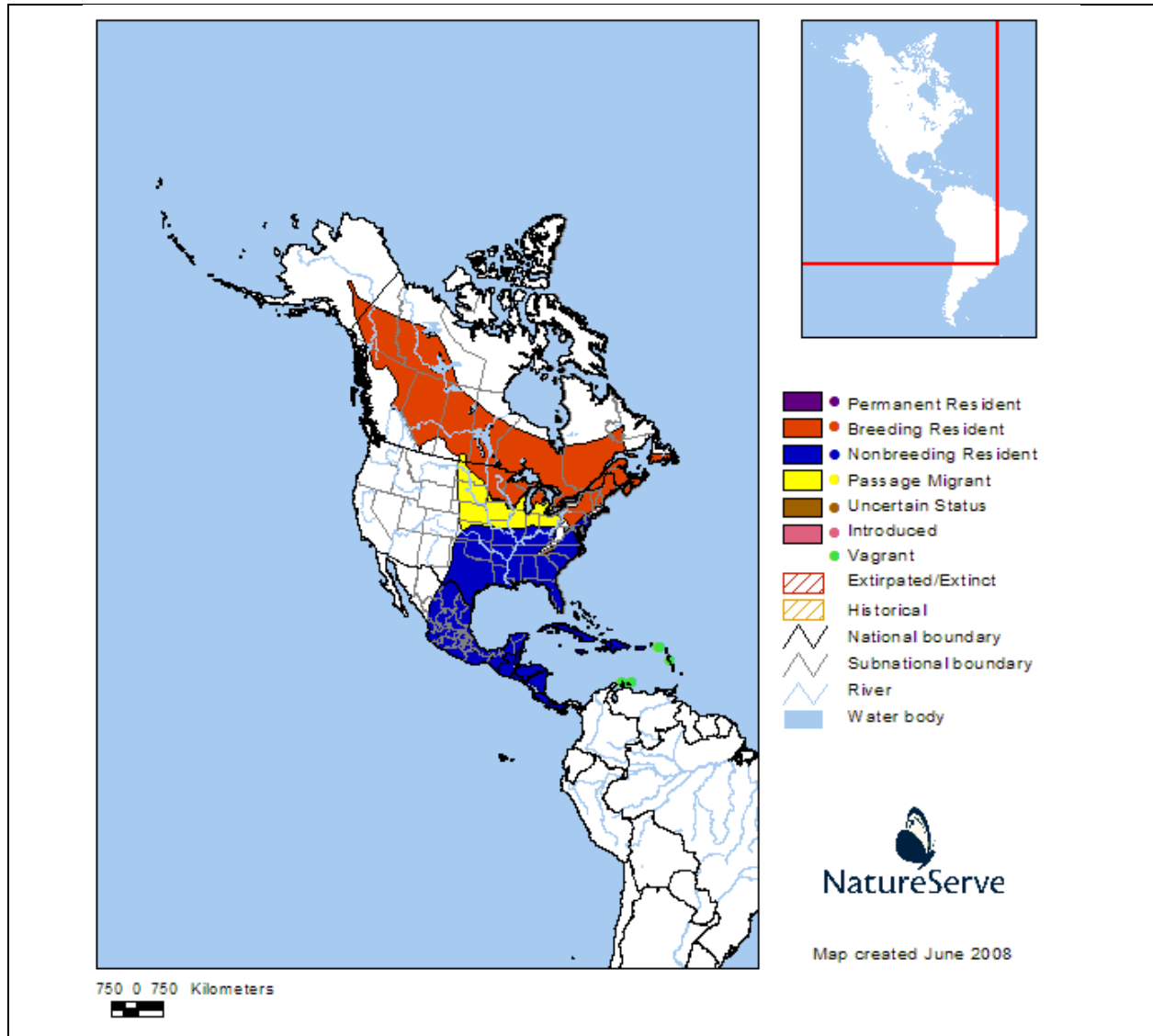
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Full species: Global – Secure; State – Vulnerable
IUCN	Least Concern

Range

The Yellow-bellied Sapsucker breeds throughout eastern Canada and New England, with their range extending south along the Appalachians. The species breeds in the mountain region of North Carolina, inhabiting the entire state during the non-breeding season.



NCWRC Species Listing Abstract




Rationale for Listing

The Appalachian Yellow-bellied Sapsucker (*Sphyrapicus varius appalachiensis*) was a designated subspecies of the Yellow-bellied Sapsucker (*Sphyrapicus varius*), but is no longer recognized as valid and not eligible for listing.

State Species Assessment Protocol Results

Not evaluated using NCSAT tool. Subspecies not considered valid.

NCWRC Species Listing Abstract

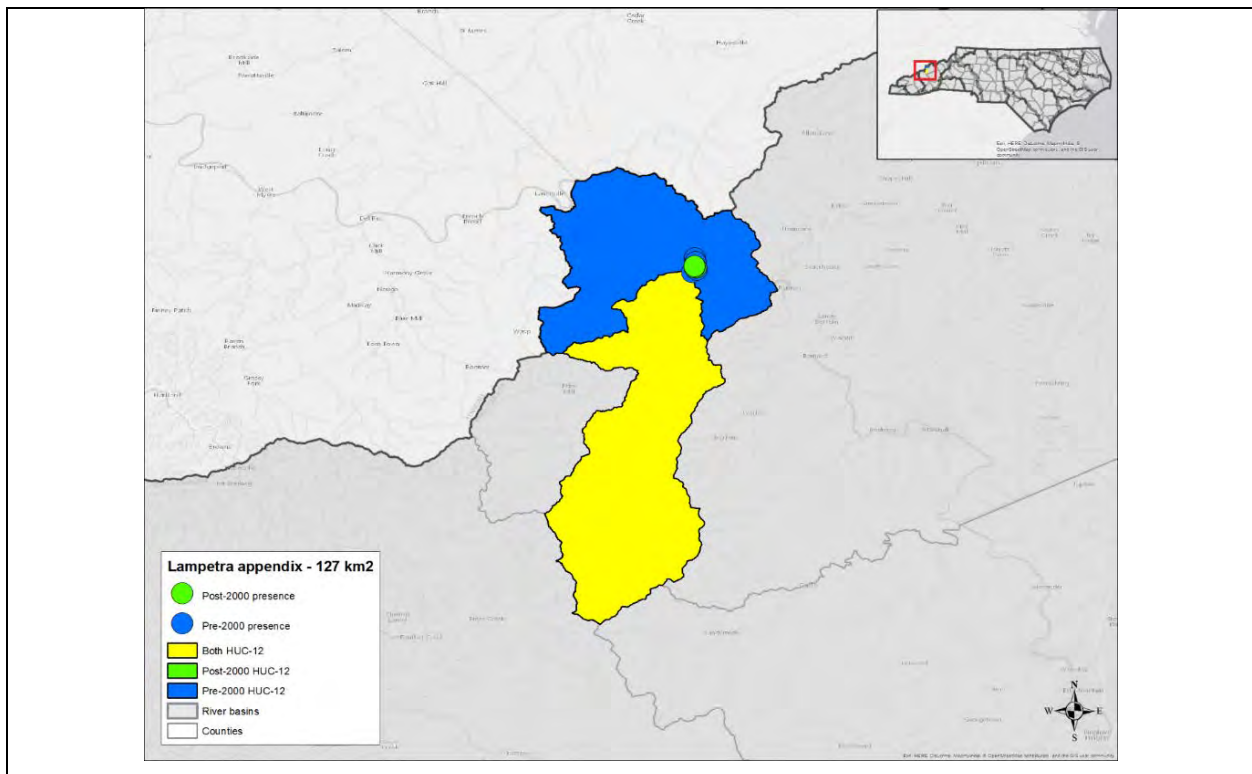
<p>Species Name: American Brook Lamprey <i>Lethenteron appendix</i></p> <p>Current N.C. Status: Threatened</p> <p>Proposed N.C. Status: Special Concern</p>	 <p>http://www.wildlife.state.nh.us/</p>
--	---

Status

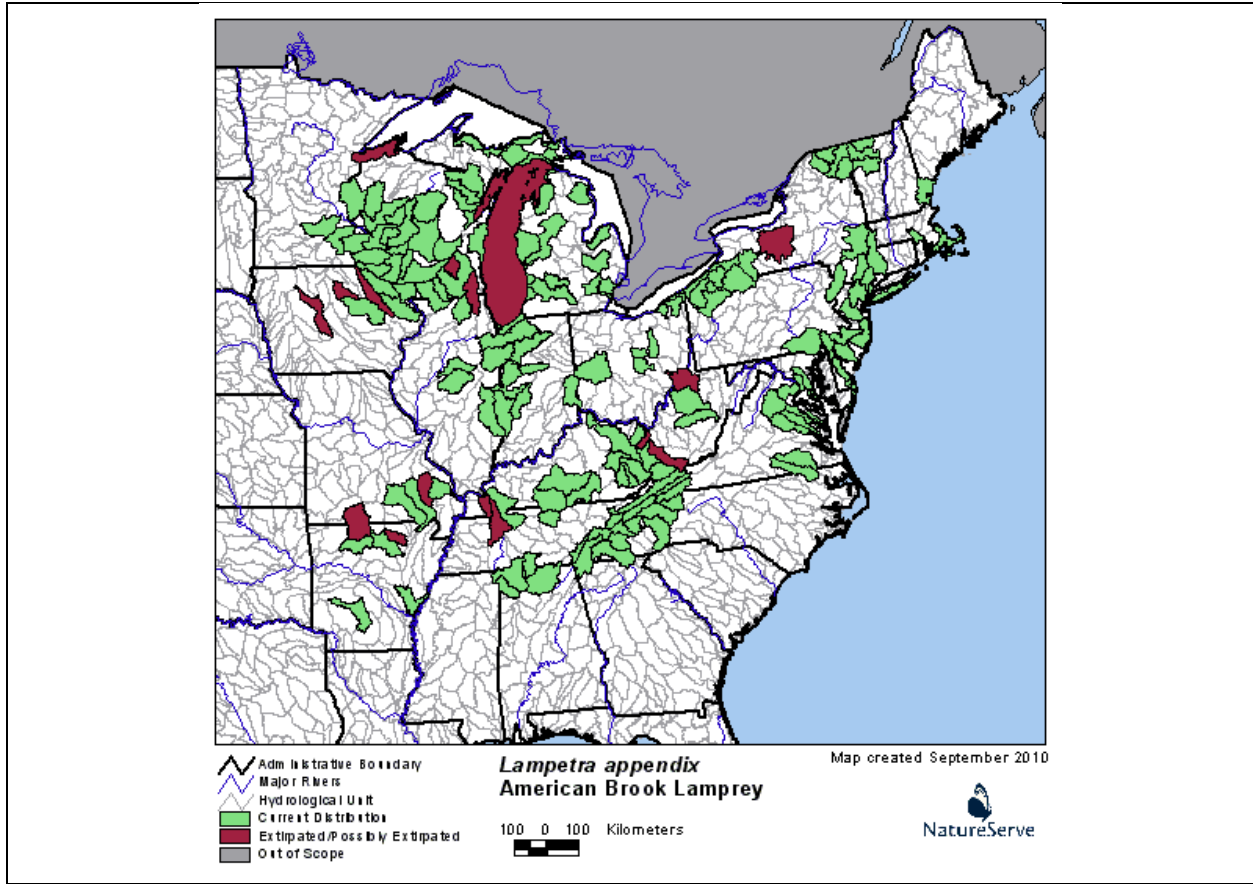
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	N/A
NatureServe	Global – Apparently Secure; State – Critically Imperiled
IUCN	Least Concern

Range

The American Brook Lamprey is found in the Saint Lawrence River basin, the Mississippi River basin, exclusive of the Missouri River basin, and along the Atlantic slope from New Hampshire to the Chowan River drainage in Virginia. In August 1977, the first record of the American Brook Lamprey from North Carolina was recorded from the French Broad River at the mouth of Spring Creek in the Town of Hot Springs, Madison County.



NCWRC Species Listing Abstract



Rationale for Listing

This species was discovered in North Carolina in 1977. It is currently known from only one location (Spring Creek, Madison County) in North Carolina, but may inhabit other streams in the immediate surrounding area downstream to the Tennessee state line. There is no information on population trend for this species in North Carolina. This is one of a suite of species whose local range is primarily outside North Carolina in the Valley and Ridge physiographic province portions of the Tennessee River system, and are not known to occupy habitats in the Blue Ridge physiographic province (or if so, they only occupy habitats at or near the boundary zone between these physiographic provinces) within or outside of North Carolina. The species' occurrence within North Carolina is at the extreme periphery of a much larger occupied range, it is not expected to ever be a significant part of the North Carolina ichthyofauna, and the species' status in North Carolina is relatively inconsequential to the overall status of the species across its entire range. A designation of Special Concern is a better and more realistic representation of the relative priority for conservation for American Brook Lamprey in North Carolina.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Least Concern
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Banded Sculpin

Cottus caroliniae

Current N.C. Status: Threatened

Proposed N.C. Status: Special Concern

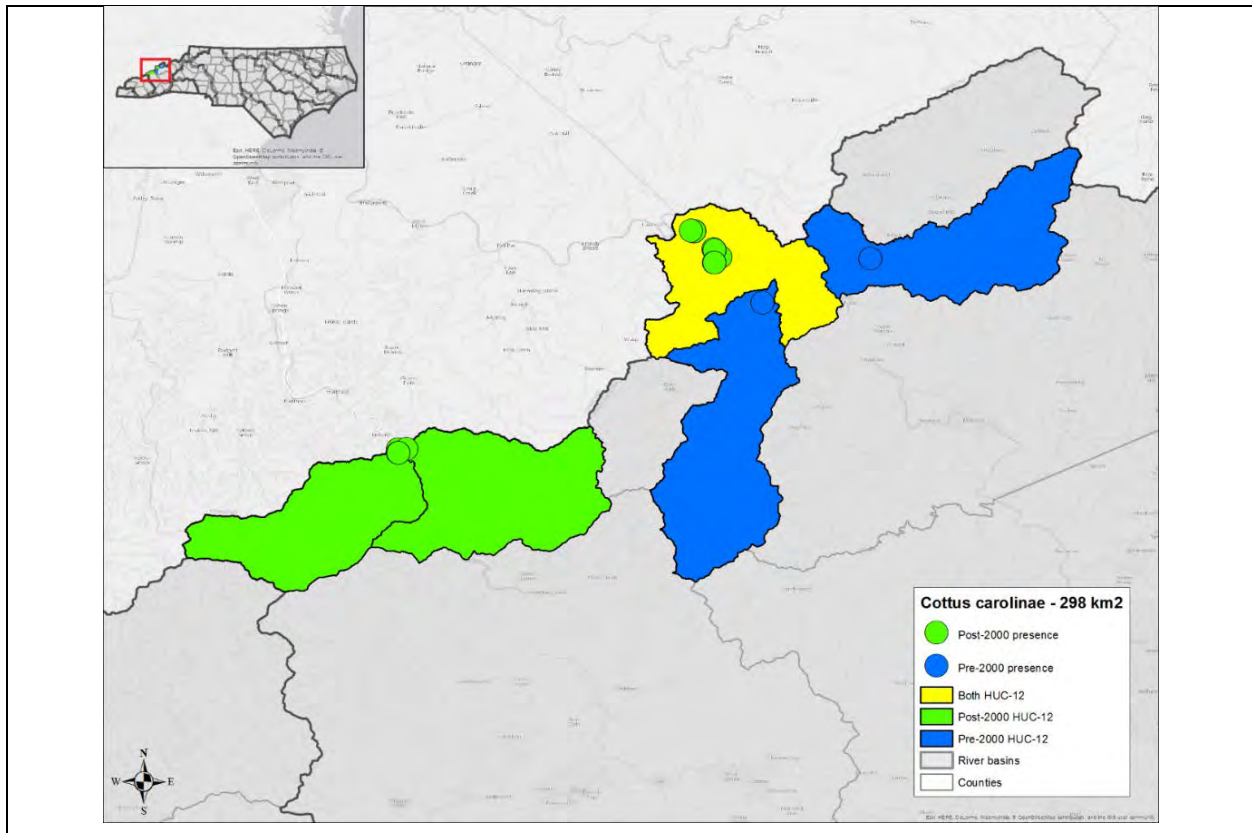


Status

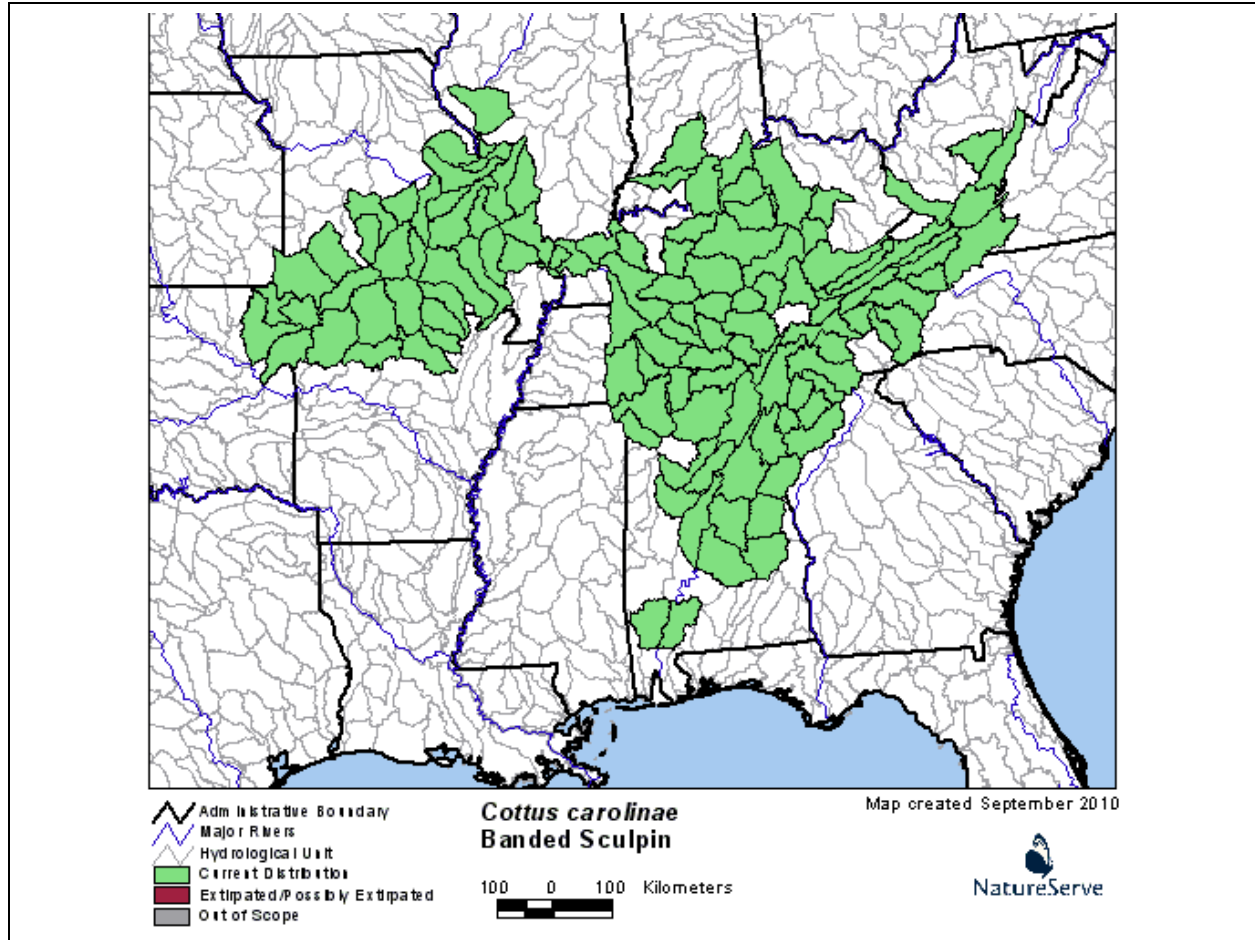
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	N/A
NatureServe	Global – Secure; State – Critically Imperiled
IUCN	Least Concern

Range

The Banded Sculpin is widespread and common throughout the Ozark region; the Tennessee and Cumberland river drainages, the Mobile Basin both above and, less commonly, below the Fall Line, and the Ohio River drainage from its mouth to its southern headwaters.



NCWRC Species Listing Abstract




Rationale for Listing

The Banded Sculpin is one of a suite of species whose local range is primarily outside North Carolina in the Valley and Ridge physiographic province portions of the Tennessee River system, and are not known to occupy habitats in the Blue Ridge physiographic province (or if so, they only occupy habitats at or near the boundary zone between these physiographic provinces) within or outside of North Carolina. The species' occurrence within North Carolina is at the extreme periphery of a much larger occupied range, it is not expected to ever be a significant part of the North Carolina ichthyofauna, and the species' status in North Carolina is relatively inconsequential to the overall status of the species across its entire range. This species is currently stable and abundant in Tennessee. This species qualifies as Special Concern using the NCSAT. A designation of Special Concern is a better and more realistic representation of the relative priority for conservation of Banded Sculpin in North Carolina.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

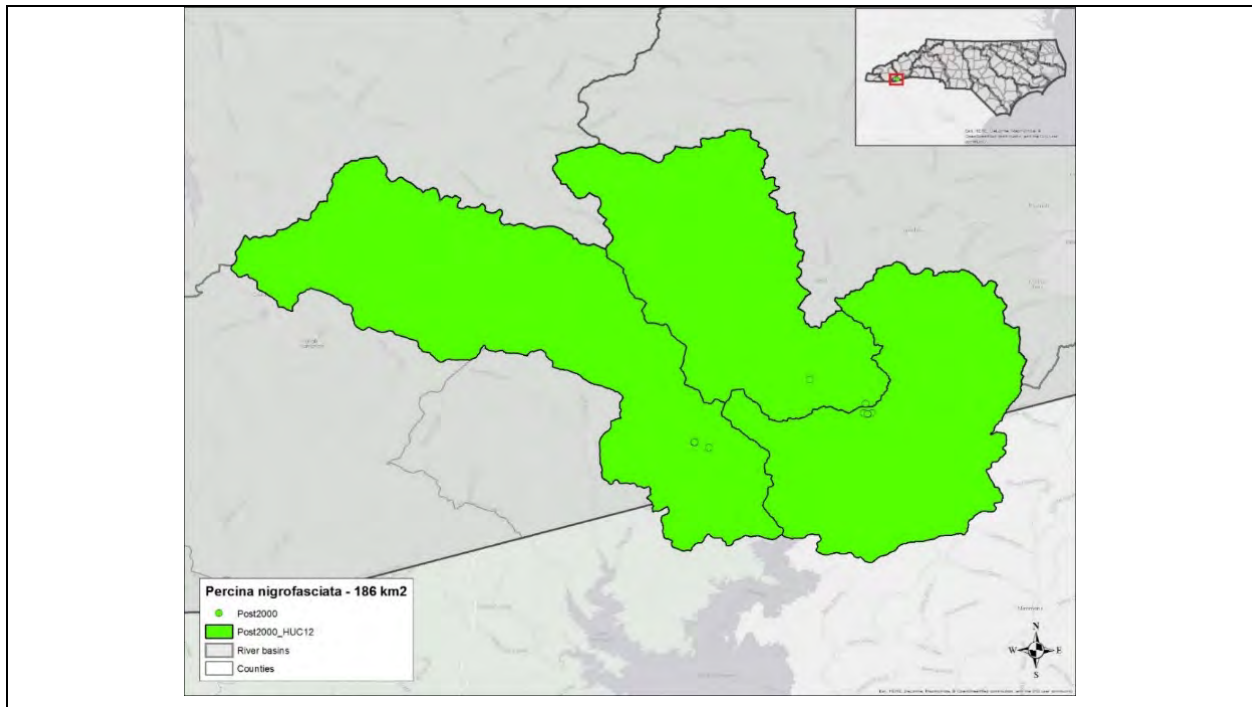
<p>Species Name: Blackbanded Darter <i>Percina nigrofasciata</i></p> <p>Current N.C. Status: Threatened</p> <p>Proposed N.C. Status: Special Concern</p>	 <p style="font-size: small;">www.usgs.gov</p>
---	--

Status

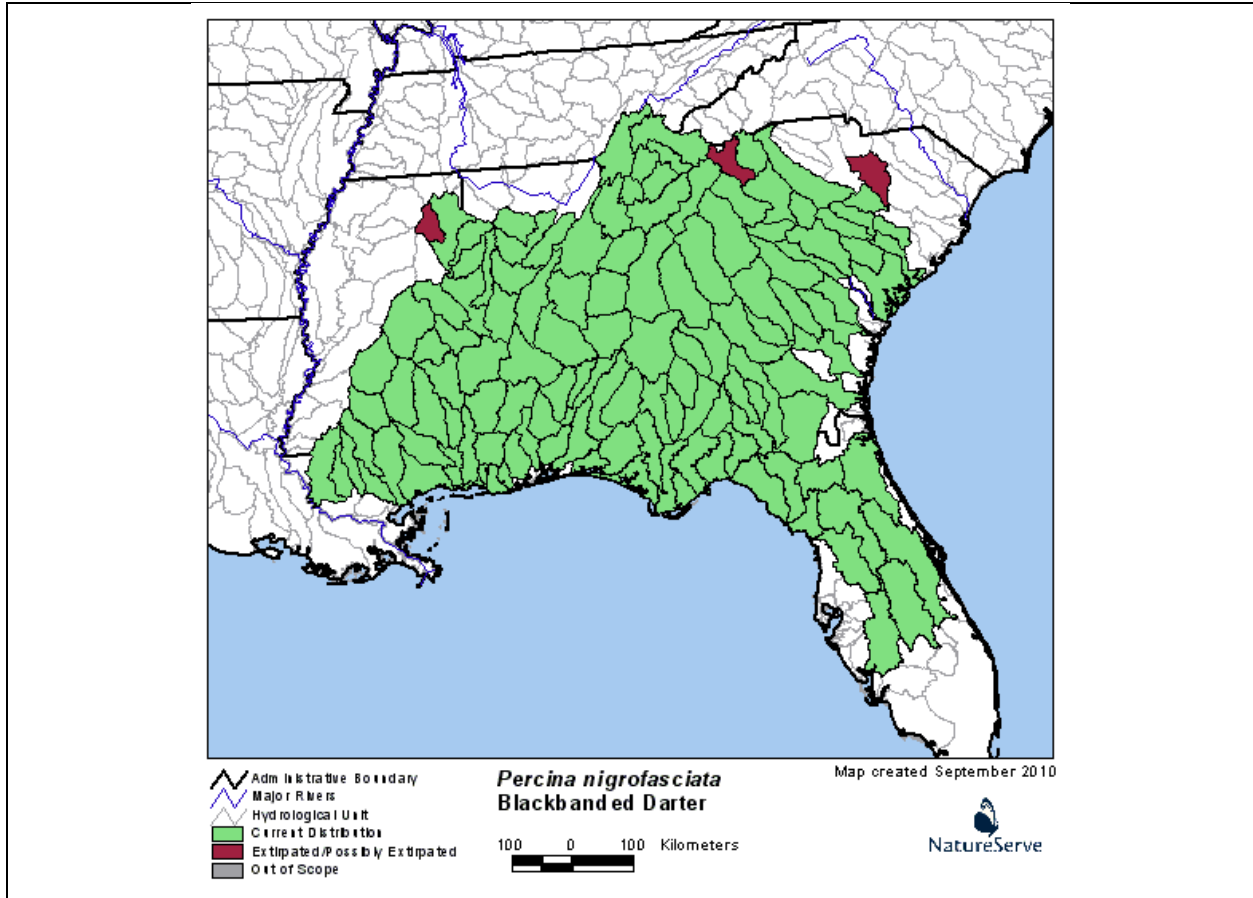
Federal	Not listed
Virginia	N/A
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Secure; State – Critically Imperiled
IUCN	Least Concern

Range

The Blackbanded Darter is known from the Edisto River of South Carolina southward and westward to the eastern tributaries of the Mississippi River in southwestern Mississippi. In North Carolina, the species is known from two locales in the Toxaway River system, headwaters of Savannah River in Transylvania County, just above the impounded waters of Lake Jocassee Reservoir; another specimen from Toxaway Creek in Transylvania County is in the Duke Power Fish Museum.



NCWRC Species Listing Abstract



Rationale for Listing

The Blackbanded Darter is one of a suite of species whose local range is primarily outside North Carolina in the Piedmont physiographic province portions of many Atlantic Slope, Gulf Coast, and lower Mississippi river systems, and are not known to occupy habitats in the Blue Ridge physiographic province (or if so, they only occupy habitats at or near the boundary zone between these physiographic provinces) within or outside of North Carolina. The species' occurrence within North Carolina is at the extreme periphery of a much larger occupied range, it is not expected to ever be a significant part of the North Carolina ichthyofauna, and the species' status in North Carolina is relatively inconsequential to the overall status of the species across its entire range. This species is currently stable and abundant throughout most of its range. This species qualifies as Special Concern using the NCSAT. A designation of Special Concern is a better and more realistic representation of the relative priority for conservation for Blackbanded Darter in North Carolina.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Mimic Shiner
Notropis volucellus

Current N.C. Status: Not Listed
Proposed N.C. Status: Threatened

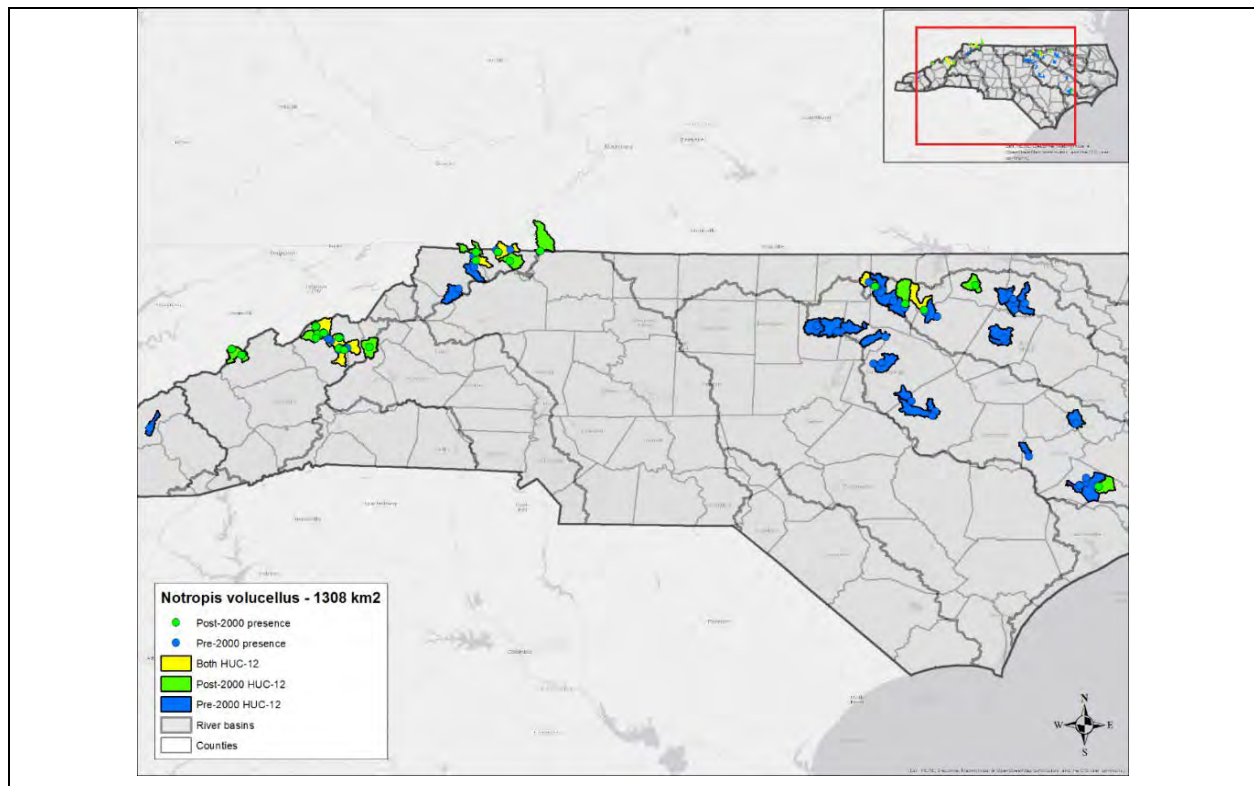


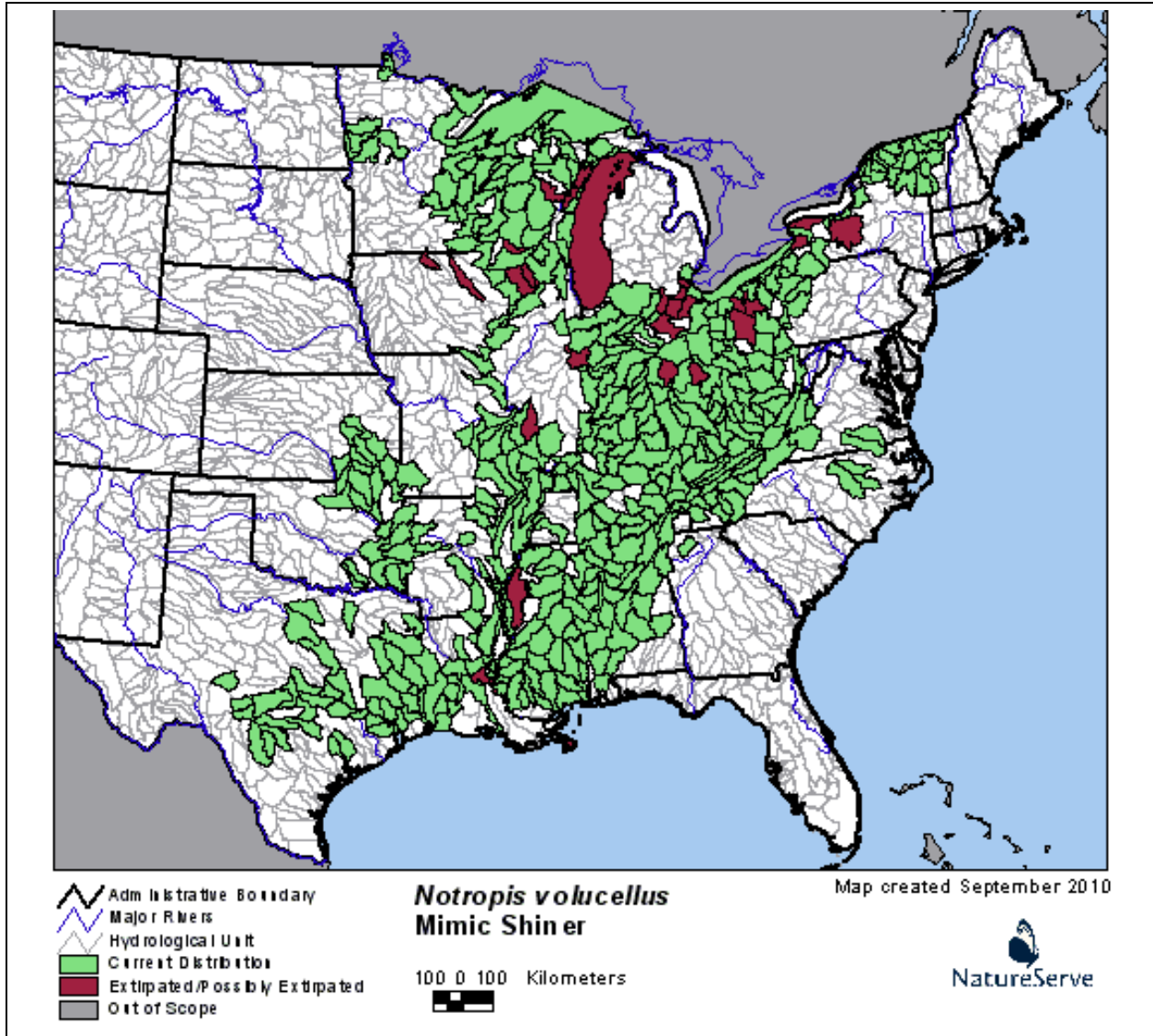
Status

Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Secure; State – Imperiled
IUCN	Least Concern

Range

In North Carolina, disparate populations are known in the Tar and Neuse rivers and their larger tributaries on the Atlantic Slope, the New River of the Ohio River drainage, and in the French Broad portion of the upper Tennessee River drainage, including the French Broad River proper and the Nolichucky River subbasin, mainly the Cane and Toe River systems.






Rationale for Listing

Populations of the Mimic Shiner appear to be declining in North Carolina, particularly in the Neuse River basin. Declines in extent of occurrence and area of occupancy (~60%) exceed the threshold for Threatened.

State Species Assessment Protocol Results

Criterion	Score
A	Threatened
B	Threatened
C	Data Deficient
D	Threatened
Overall	Threatened

NCWRC Species Listing Abstract

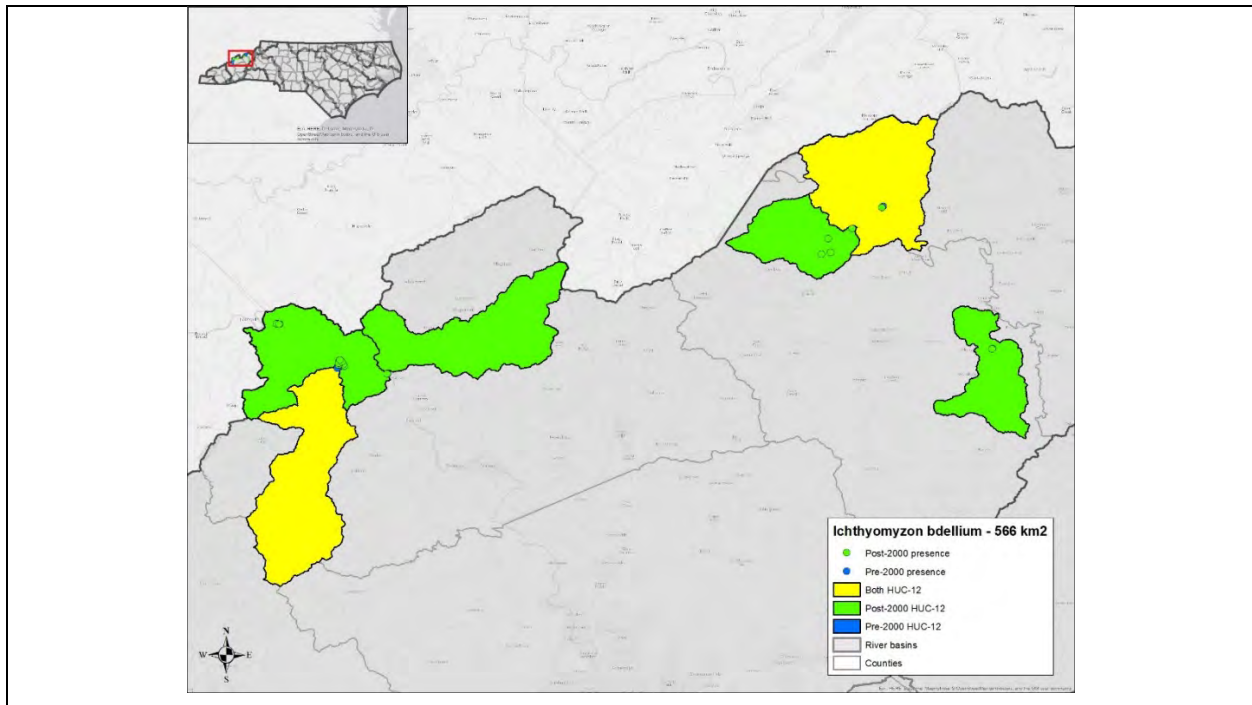
<p>Species Name: Ohio Lamprey <i>Ichthyomyzon bdellium</i></p> <p>Current N.C. Status: Not Listed</p> <p>Proposed N.C. Status: Special Concern</p>	
---	--

Status

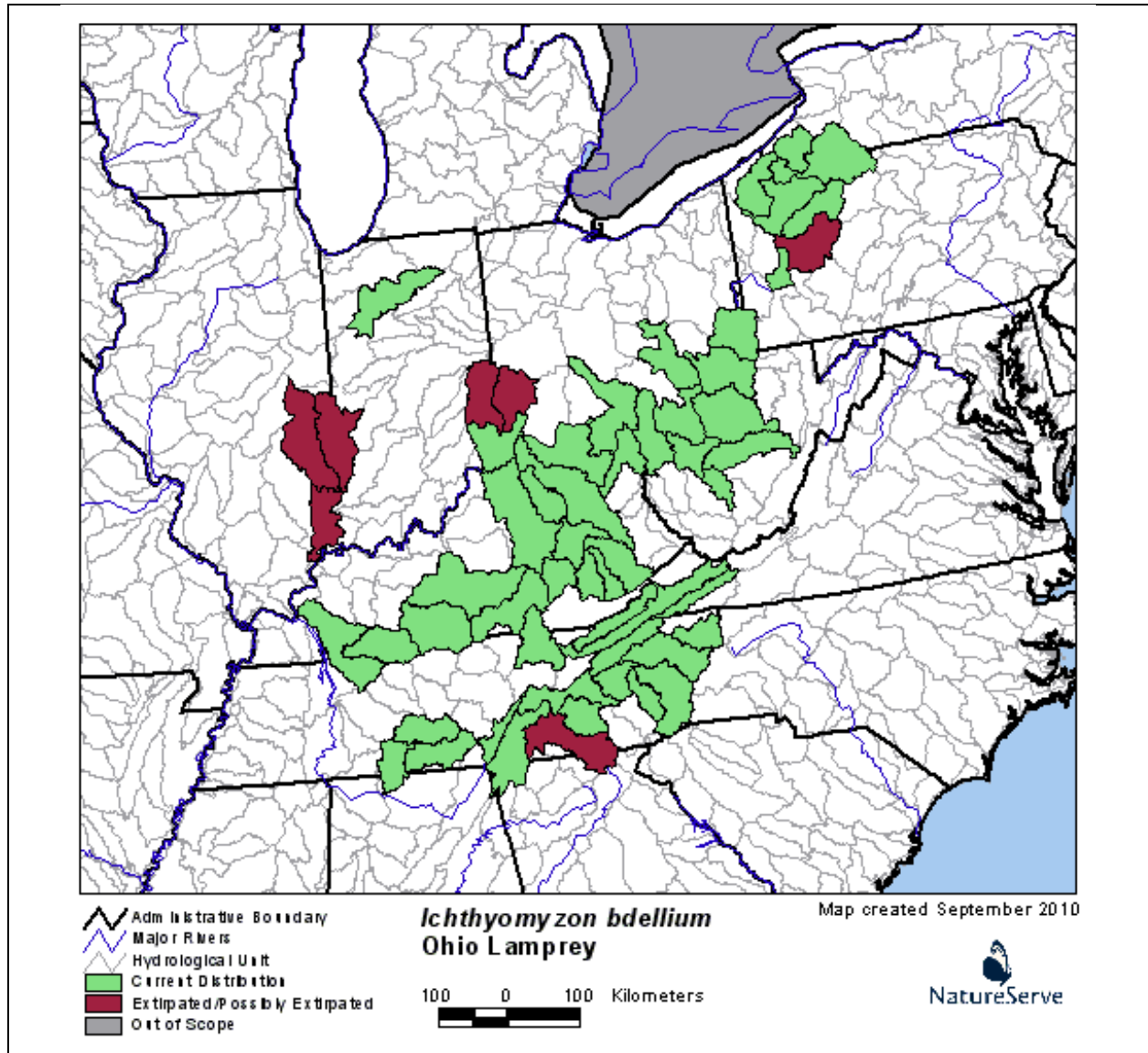
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Rare
South Carolina	N/A
NatureServe	Global – Vulnerable; State – Critically Imperiled
IUCN	Least Concern

Range

The Ohio Lamprey is an example of a peripheral species whose distribution in North Carolina is limited, but is more abundant in neighboring states. In North Carolina, the Ohio Lamprey is known from vouchered specimens primarily from the French Broad River and Spring Creek near Hot Springs in Madison County and from two widely separated locations in the Nolichucky River system. Its occurrence in North Carolina has only been documented during the past 20 years. Whether it has recently colonized the lower French Broad and the Nolichucky River systems due to improving water quality, larval habitat suitability, or adult host availability is unknown.



NCWRC Species Listing Abstract



Rationale for Listing

The species is present and at least locally common to abundant in the French Broad River from the state line upstream to Redmon Dam and in the Nolichucky River system upstream at least to the South Toe River. Due to the limited range (less than five locations), a Special Concern status is recommended.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Riverweed Darter
Etheostoma podostemone

Current N.C. Status: Special Concern

Proposed N.C. Status: Not Listed

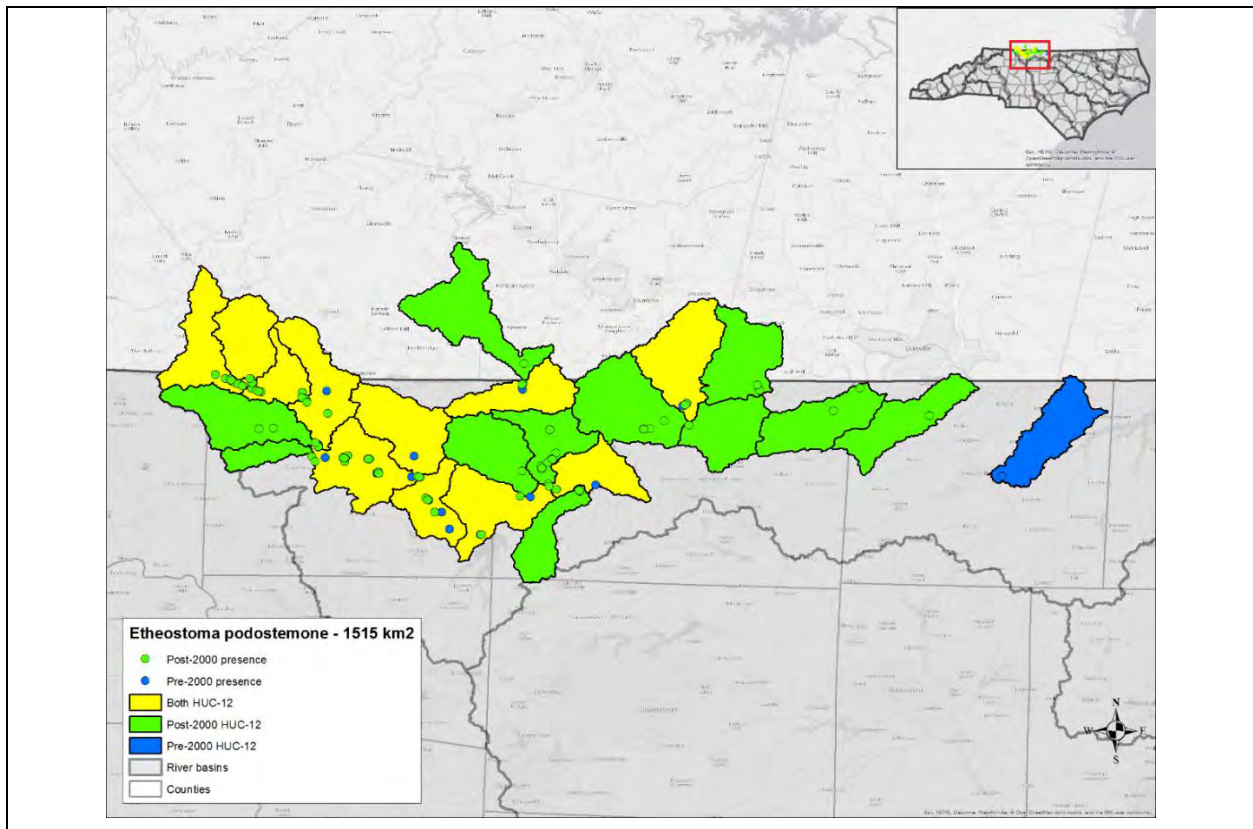


Status

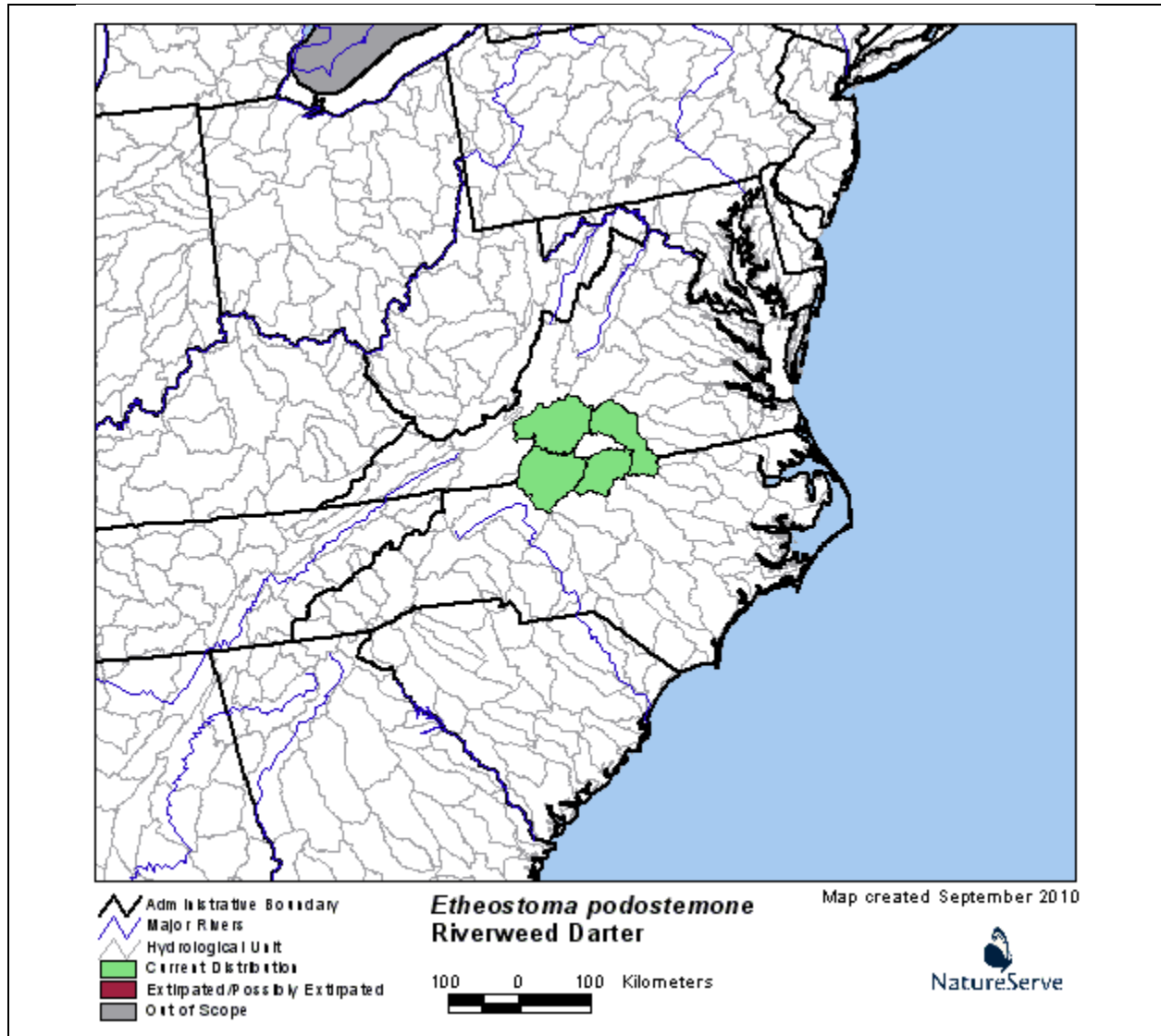
Federal	Not listed
Virginia	Not listed
Tennessee	N/A
Georgia	N/A
South Carolina	N/A
NatureServe	Global – Apparently Secure; State – Vulnerable
IUCN	Least Concern

Range

The Riverweed Darter is found in Virginia and North Carolina in the Roanoke system proper and Dan River system. In North Carolina it is found in the Dan River basin in Caswell, Rockingham, and Stokes Counties.



NCWRC Species Listing Abstract



Rationale for Listing

Riverweed Darter Population levels appear to be relatively stable and the species is abundant and is found in numerous locations. The Riverweed Darter does not exceed any of the thresholds for listing.

State Species Assessment Protocol Results

Criterion	Score
A	Least Concern
B	Least Concern
C	Least Concern
D	Least Concern
Overall	Least Concern

NCWRC Species Listing Abstract

Species Name: Sharpnose Darter
Percina oxyrhyncus

Current N.C. Status: Special Concern
Proposed N.C. Status: Endangered



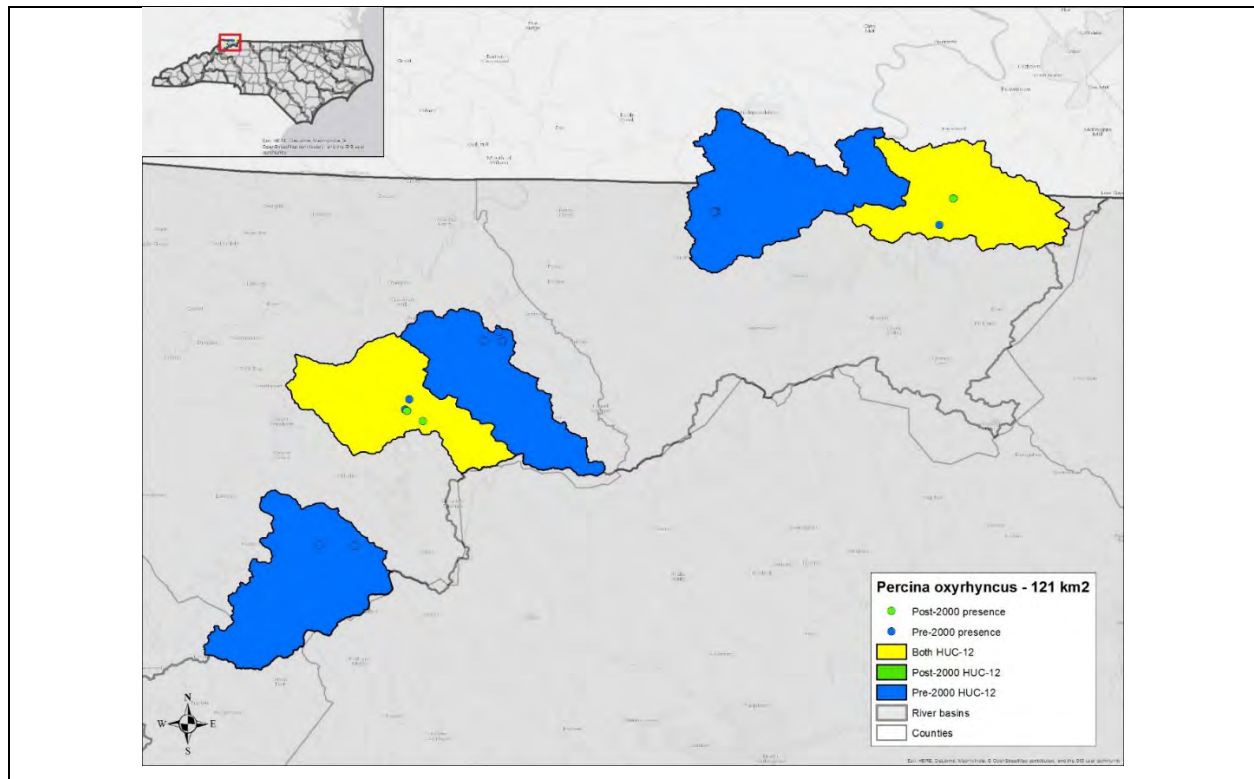
Southeastern Fishes Council

Status

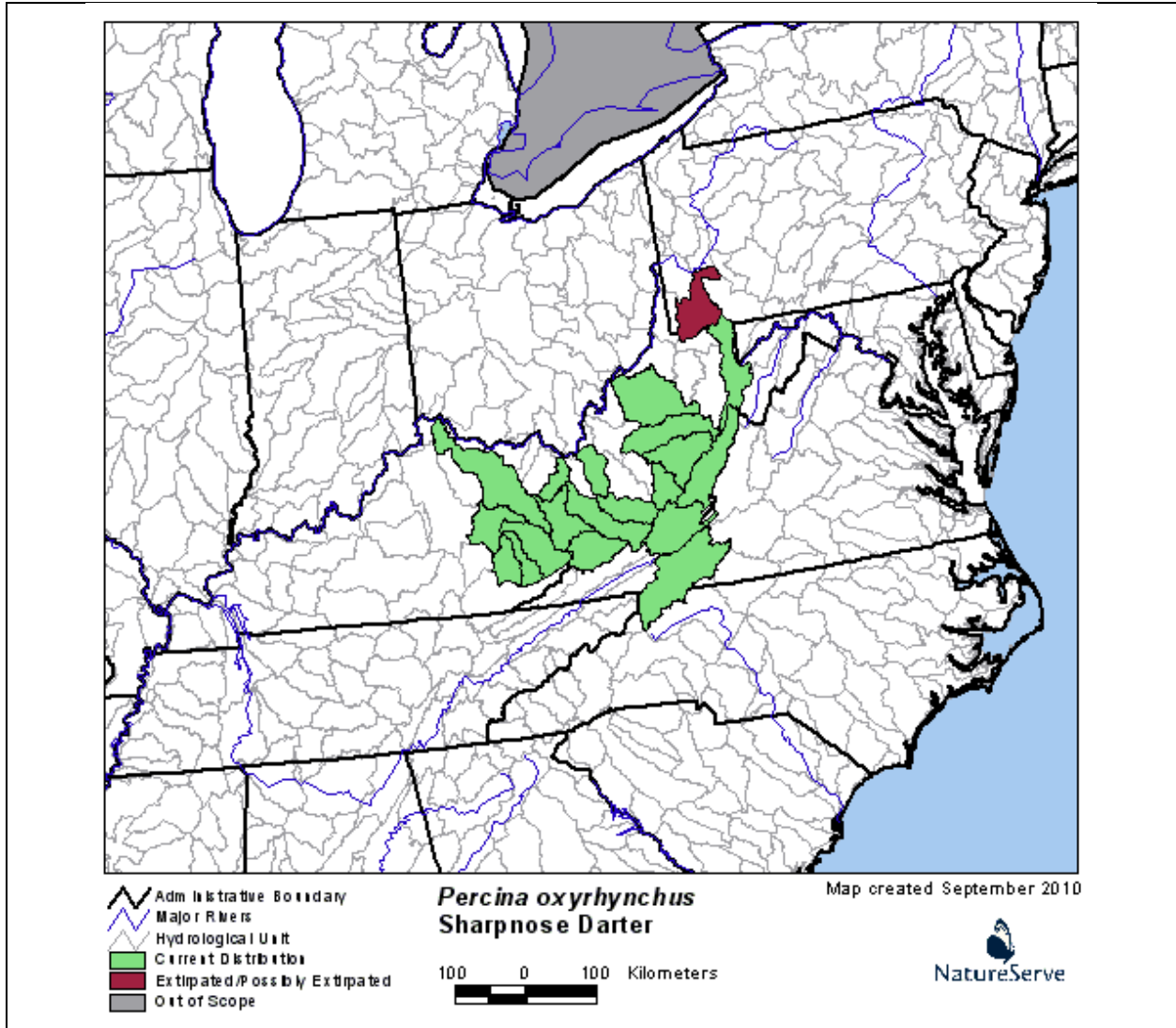
Federal	Not listed
Virginia	Not listed
Tennessee	N/A
Georgia	N/A
South Carolina	N/A
NatureServe	Global – Apparently Secure; State – Critically Imperiled
IUCN	Least Concern

Range

The Sharpnose Darter is indigenous to the Ohio River Basin and occurs in southern tributaries to that basin from the Kentucky River drainage in eastern Kentucky to the Monongahela River drainage in western Pennsylvania and West Virginia. In North Carolina the species is known from the New River, South Fork New River, and the lower Little River in Ashe and Alleghany counties.



NCWRC Species Listing Abstract




Rationale for Listing

This species appears to be declining in North Carolina. It was found in only 1 of 28 sites surveyed by NCWRC biologists in 2008. Follow-up surveys in 2016 detected few specimens as well. No specimens have been collected by the NC Division of Water Resources Surveys in the New River Basin. Area of Occupancy has been reduced by 83%. Reasons for the decline are currently unknown. This species exceeds the threshold for Endangered using the NCSAT.

State Species Assessment Protocol Results

Criterion	Score
A	Endangered
B	Endangered
C	Data Deficient
D	Special Concern
Overall	Endangered

NCWRC Species Listing Abstract

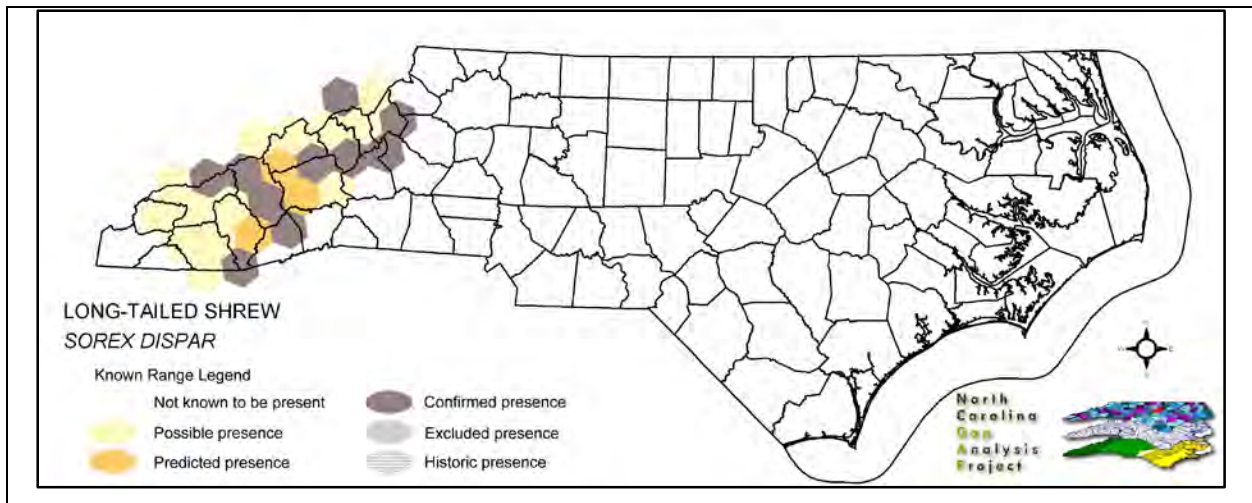
<p>Species Name: Southern Rock Shrew (Long-tailed Shrew) <i>Sorex dispar blitchi</i></p> <p>Current N.C. Status: Special Concern</p> <p>Proposed N.C. Status: Not Listed</p>	
---	--

Status

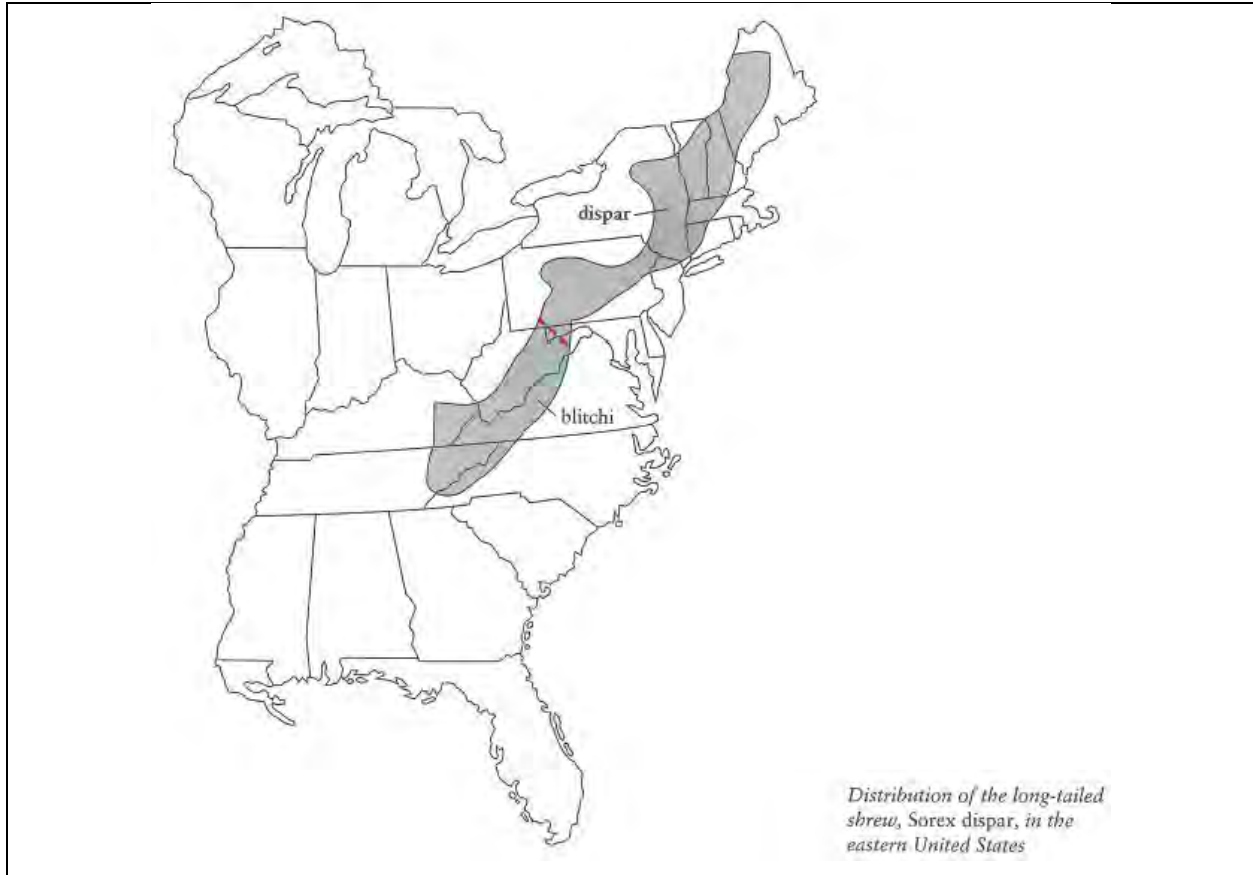
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	N/A
South Carolina	N/A
NatureServe	Global – Vulnerable; State – Not assessed
IUCN	Least Concern

Range

The Southern Rock Shrew (Long-tailed Shrew) occurs on talus slopes in mountainous, forested areas and can also be present along mountain streams. Individuals have been documented using artificial talus created by road construction and pit mines. As the name suggests, this shrew spends most of its time in the crevices between rocks. The range of the Southern Rock Shrew extends through the central and southern Appalachian Mountains from southwestern Pennsylvania to North Carolina and Tennessee.



NCWRC Species Listing Abstract



Rationale for Listing

NCWRC surveys have documented that this species is more widespread and common in suitable habitat than previously considered. Therefore, the recommendation is to delist this species from Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Least Concern
C	Least Concern
D	Least Concern
Regional	No Change
Overall	Least Concern

NCWRC Species Listing Abstract

Species Name: Southern Water Shrew
Sorex palustris punctulatus

Current N.C. Status: Special Concern

Proposed N.C. Status: Not Listed

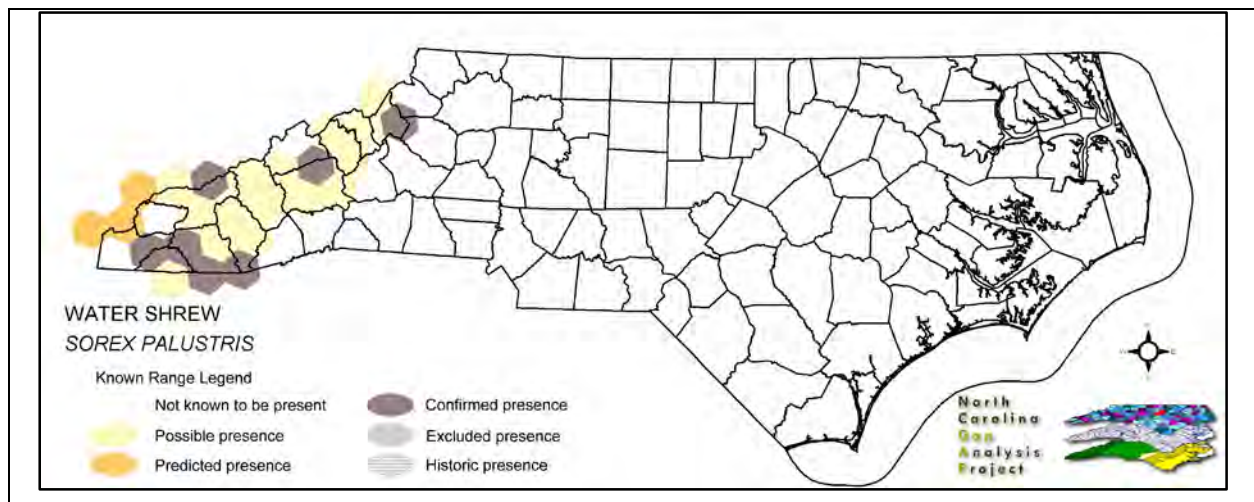


Status

Federal	Not listed
Virginia	Endangered
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Vulnerable; State – Vulnerable
IUCN	Species – Least Concern; Sub-species – Not assessed

Range

The Southern Water Shrew occurs along mountain streams within forests, but can also occur around lakes, ponds, marshes, and bogs. The range of the Southern Water Shrew extends through the central and southern Appalachian Mountains from southwestern Pennsylvania to North Carolina, Tennessee, and possibly northern Georgia. This subspecies is disjunct from populations of other water shrew populations.



NCWRC Species Listing Abstract




Rationale for Listing

NCWRC surveys have documented that this species is more widespread and common in suitable habitat than previously considered. Therefore, the recommendation is to delist this species from Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Least Concern
C	Least Concern
D	Least Concern
Regional	No Change
Overall	Least Concern

NCWRC Species Listing Abstract

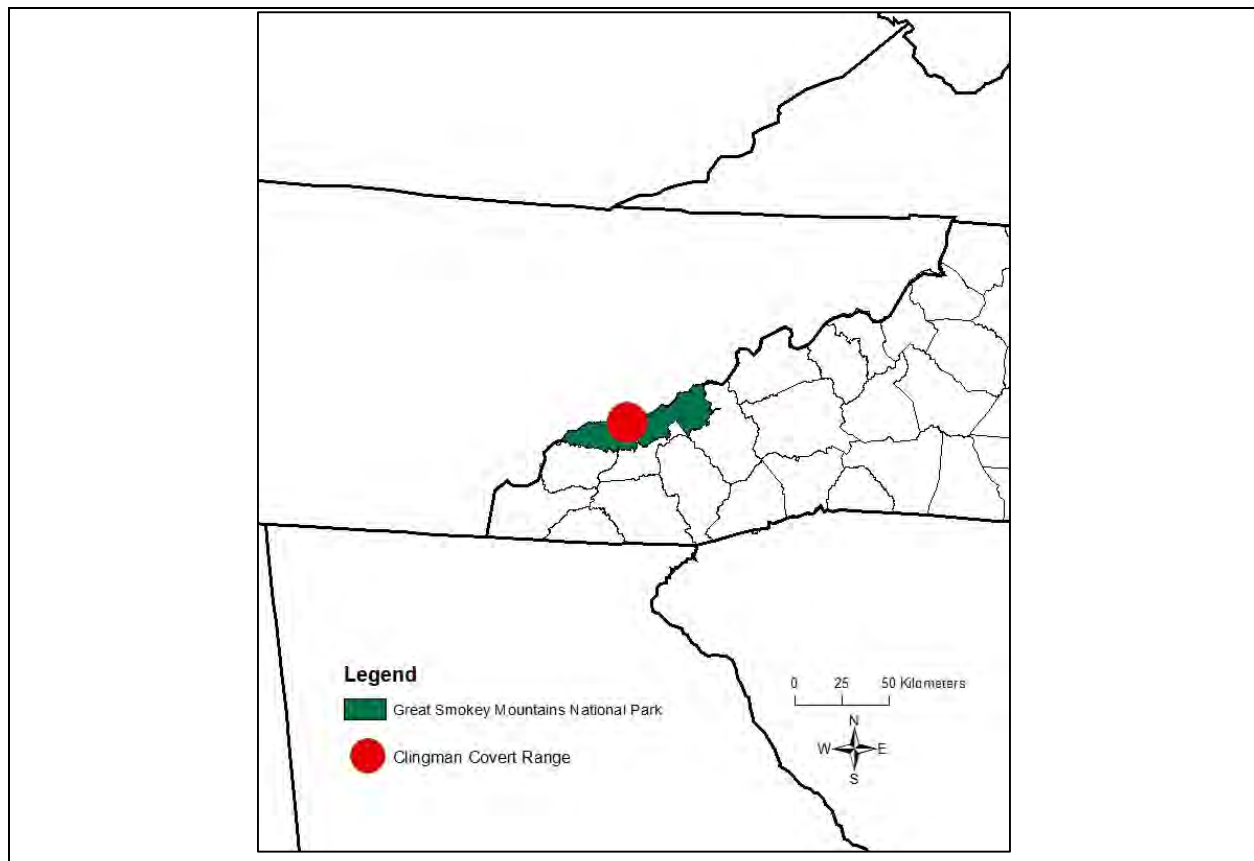
<p>Species Name: Clingman Covert <i>Fumonelix wheatleyi clingmanicus</i></p> <p>Current N.C. Status: Threatened</p> <p>Proposed N.C. Status: Special Concern</p>	
---	--

Status

Federal	Not listed
Virginia	N/A
Tennessee	Not listed
Georgia	N/A
South Carolina	N/A
NatureServe	Global – Imperiled; State – Critically Imperiled
IUCN	Not assessed

Range

This subspecies is found only near the summit of Clingman Dome in Sevier County, Tennessee and Swain County, North Carolina in the Great Smokey Mountains National Park.



NCWRC Species Listing Abstract

No National Range Map Available

Rationale for Listing

This subspecies is endemic to the high elevation areas around Clingman Dome. The extent of occurrence for this species is 100-250 square km (about 40-100 square miles) and is only found in one location, the area around Clingman Dome.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Longsolid

Fusconaia subrotunda

Current N.C. Status: Not Listed

Proposed N.C. Status: Endangered

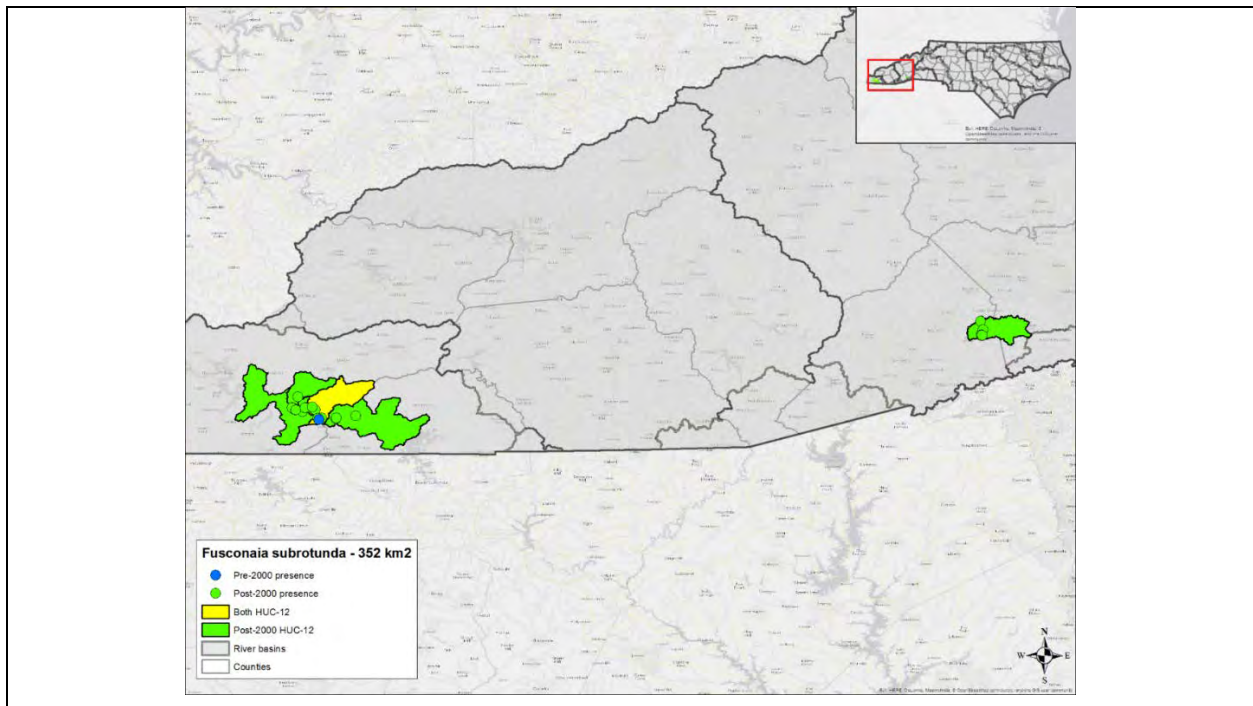


Status

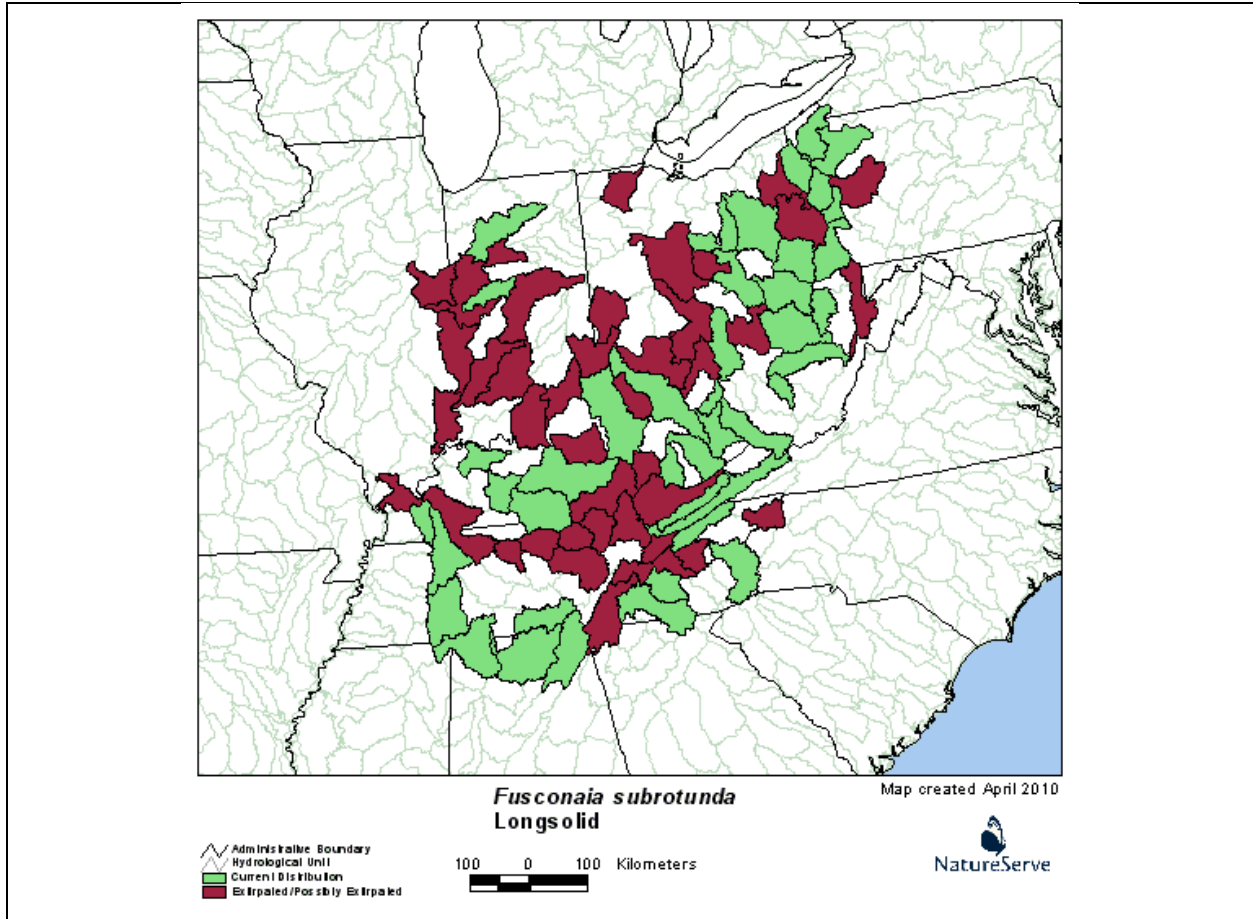
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	N/A
NatureServe	Global – Vulnerable; State – Critically Imperiled
IUCN	Vulnerable

Range

This species was known historically from throughout the Ohio, Cumberland, and Tennessee River systems, but it is extirpated from much of its former range and distribution is now highly fragmented. In North Carolina, it is presently known only from short reaches of the Hiwassee and Valley rivers in Cherokee and Clay counties and the Little River (French Broad Basin) in Transylvania County.



NCWRC Species Listing Abstract



Rationale for Listing

Only two populations of the Longsolid are known in North Carolina. In the Little River, very few specimens have been seen at only two localities within 1 river mile, but among those have been young individuals that indicate ongoing recruitment. The Hiwassee population may sparsely occupy a 10-mile reach of the Hiwassee River and perhaps the lower 3 miles of Valley River upstream from Hiwassee Reservoir. It is rare overall in the Hiwassee system and recruitment appears to be rare as indicated by a population dominated by large, presumed old specimens. The North Carolina populations are a headwater form of the species, originally described as a separate species (*F. bursapastoris* B.H. Wright, 1896) but was later synonymized under *F. subrotunda* (= *pilaris*) Ortmann 1918. Headwater form populations may contain unique genetic material and North Carolina populations represent a significant proportion of the form that is still extant range-wide. The species has experienced declines in Extent of Occurrence of over 84% which surpasses the threshold for listing as endangered.

State Species Assessment Protocol Results

Criterion	Score
A	Endangered
B	Threatened
C	Data Deficient
D	Threatened
Overall	Endangered

NCWRC Species Listing Abstract

Species Name: Neuse Spike <i>Elliptio judithae</i> Current N.C. Status: Endangered Proposed N.C. Status: Not Listed	No photo available
---	--------------------

Rationale for Listing

This species has been synonymized with the Roanoke Slabshell (*Elliptio roanokensis*). It is no longer considered a valid species.

NCWRC Species Listing Abstract

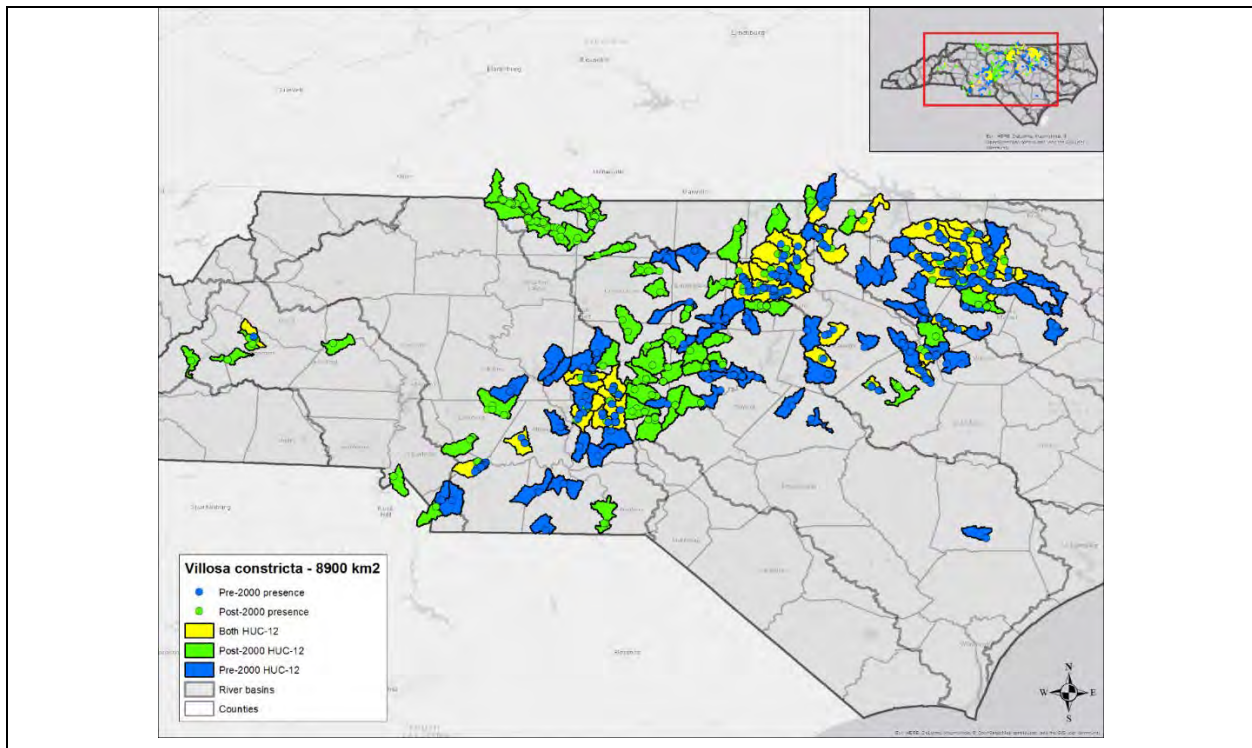
<p>Species Name: Notched Rainbow <i>Villosa constricta</i></p> <p>Current N.C. Status: Special Concern</p> <p>Proposed N.C. Status: Threatened</p>	
---	--

Status

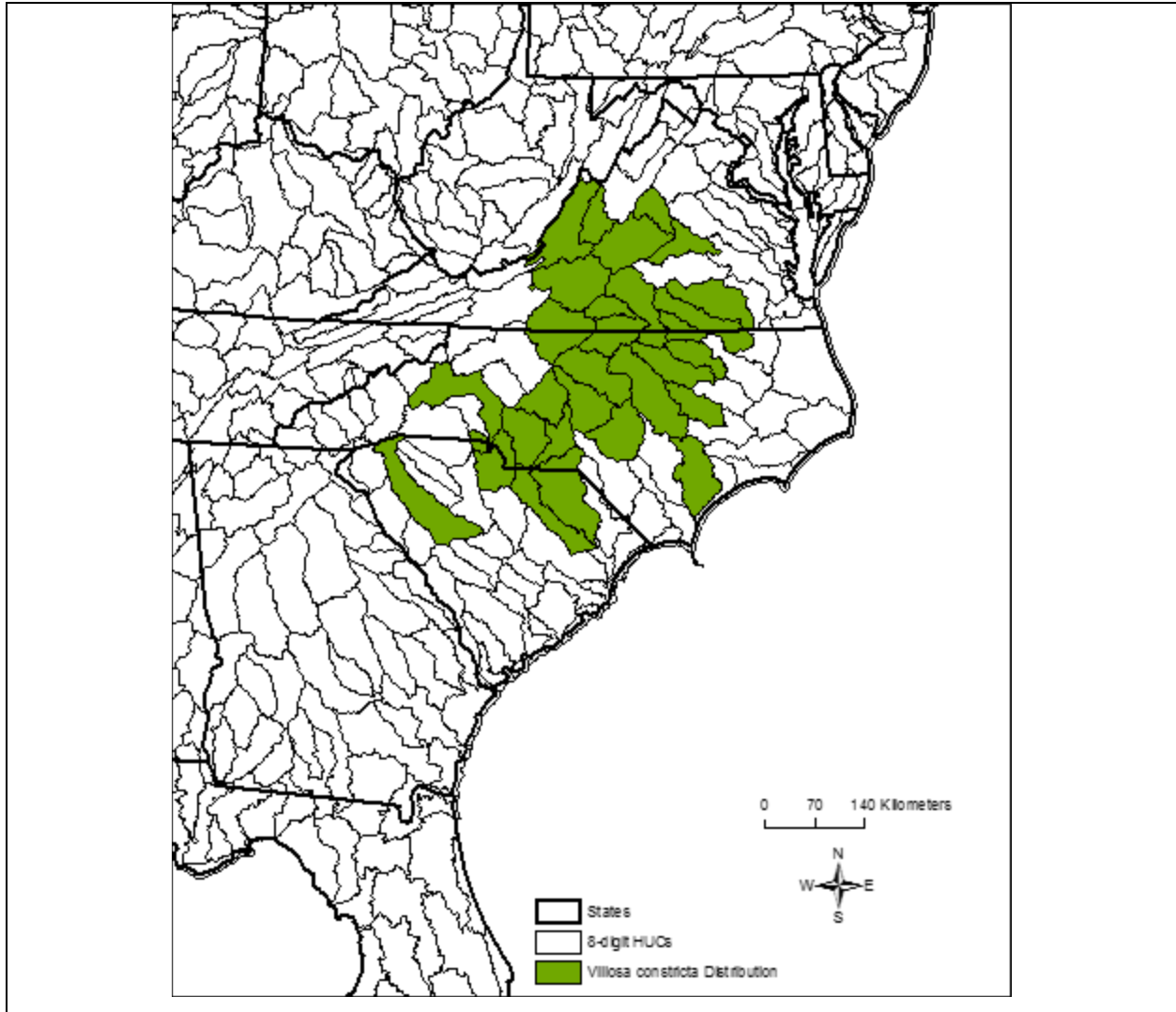
Federal	Not listed
Virginia	Not listed
Tennessee	N/A
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Vulnerable; State – Vulnerable
IUCN	Least Concern

Range

The reported range of this species is from the Rappahanock River Basin in Virginia, southward to the Saluda River Basin of the greater Cooper-Santee River Basin of South Carolina. In North Carolina it is found in the Catawba, Pee Dee, Cape Fear, Neuse, Tar/Pamlico, and Roanoke river basins.



NCWRC Species Listing Abstract




Rationale for Listing

With the exception of the Dan River population, significant declines in distribution and relative abundances of the Notched Rainbow have been recorded throughout its entire range in North Carolina. This is particularly evident in the Neuse River Basin. Occupancy has declined up to 64% which surpasses the threshold for listing this species as Threatened.

State Species Assessment Protocol Results

Criterion	Score
A	Threatened
B	Least Concern
C	Least Concern
D	Least Concern
Overall	Threatened

NCWRC Species Listing Abstract

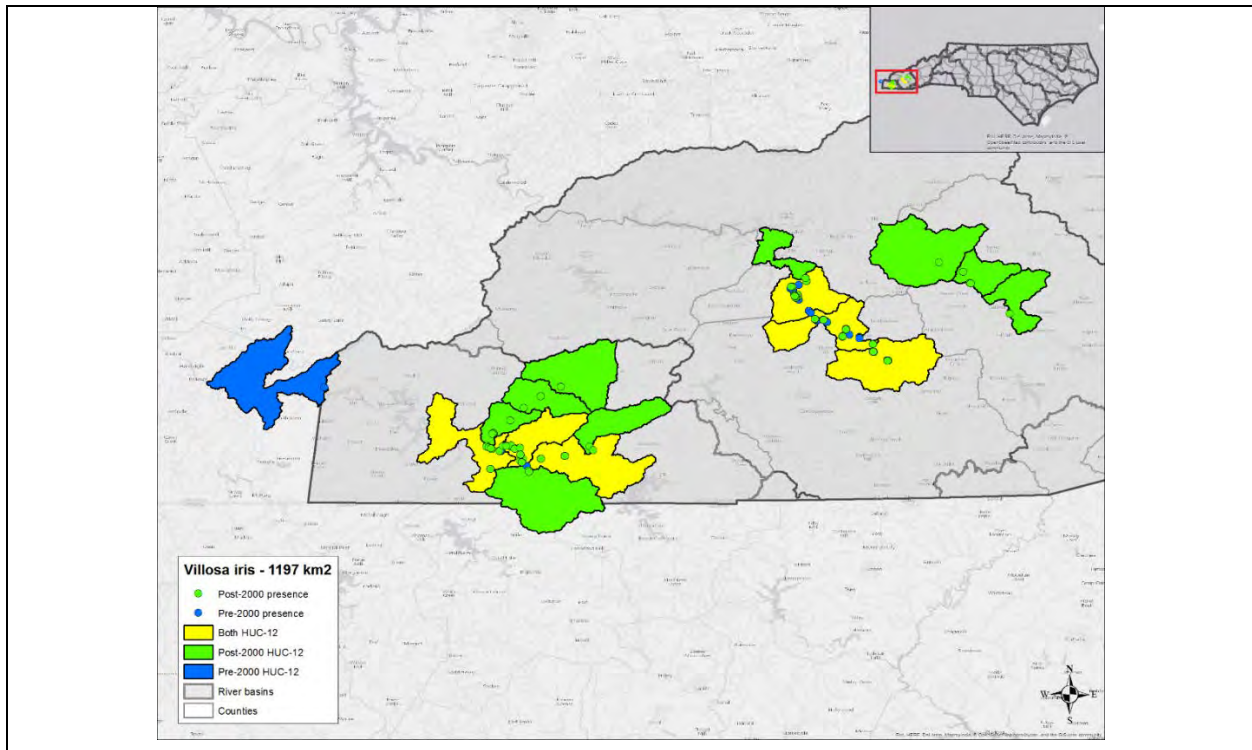
<p>Species Name: Rainbow <i>Villosa iris</i></p> <p>Current N.C. Status: Special Concern</p> <p>Proposed N.C. Status: Threatened</p>	
---	--

Status

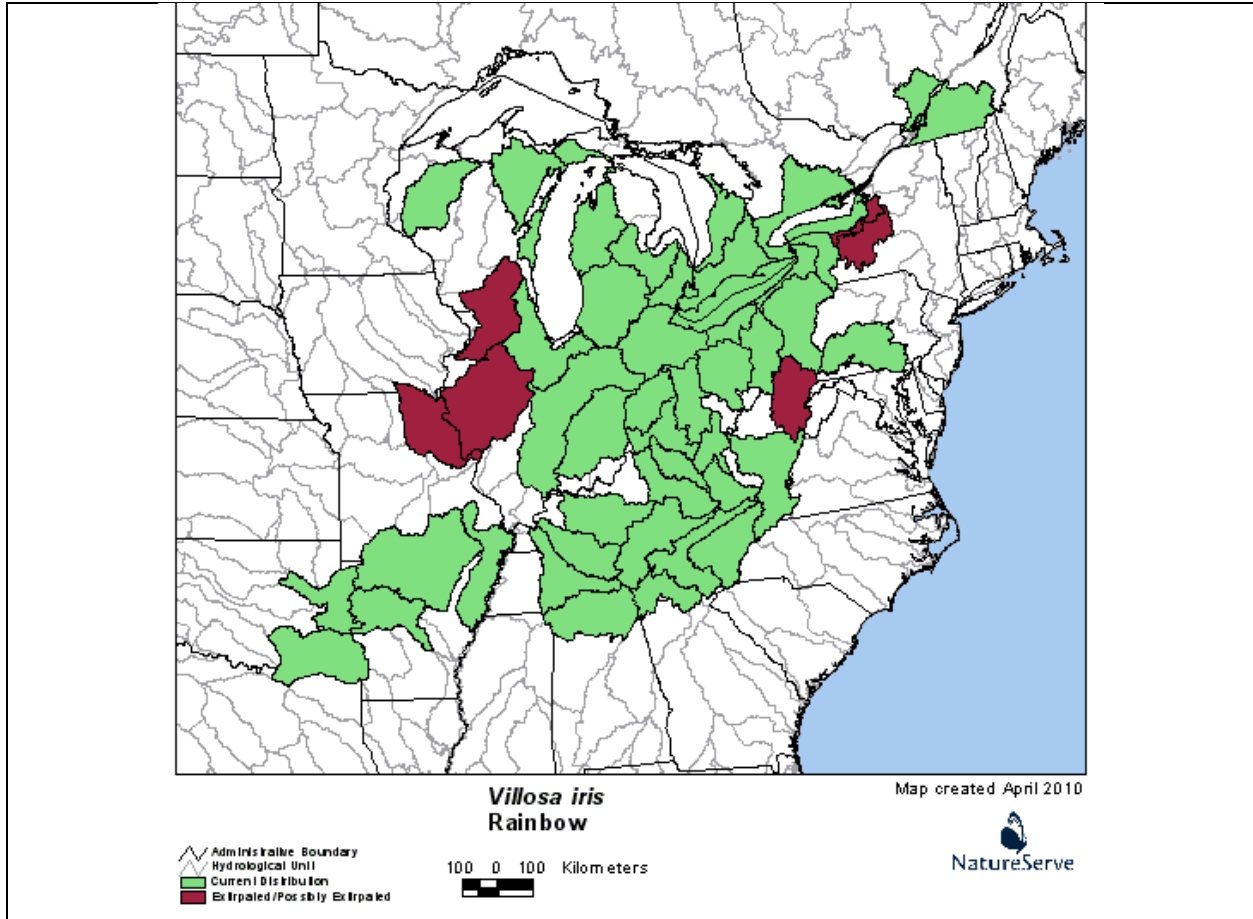
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	N/A
NatureServe	Global – Secure; State – Critically Imperiled
IUCN	Not assessed

Range

The Rainbow is found throughout the Tennessee, Cumberland, and Ohio River basins, the upper Mississippi River, and the Saint Lawrence River system from Lake Huron to Lake Ontario including their tributaries. In North Carolina, the Rainbow is reported from the Hiwassee, Little Tennessee, and historically from the French Broad rivers.



NCWRC Species Listing Abstract




Rationale for Listing

The Rainbow is common to locally abundant throughout most of the Little Tennessee River reach from Fontana Reservoir to Franklin in Swain and Macon counties. Presently, the Rainbow is restricted to relatively short reaches of the Hiwassee and Little Tennessee River systems in North Carolina where it is isolated from other populations by impoundments. Recent surveys in the Hiwassee River system have found the Rainbow to be generally uncommon to rare in Valley River and Brasstown Creek, but has been found to be locally common to abundant in the mainstem Hiwassee River (from Hiwassee Reservoir upstream to the mouth of Brasstown Creek) and Peachtree and Martins creeks in Cherokee County. However, recent surveys in Martins Creek indicate declines there due to habitat alteration. While it can be quite abundant in portions of its narrow range in the state, it is vulnerable to extirpation. The area of occupancy for this species is estimated at ~116 km², is found in less than five locations in North Carolina, and is experiencing a decline in occupancy. It therefore exceeds the threshold for Threatened.

State Species Assessment Protocol Results

Criterion	Score
A	Special Concern
B	Threatened
C	Data Deficient
D	Special Concern
Overall	Threatened

NCWRC Species Listing Abstract

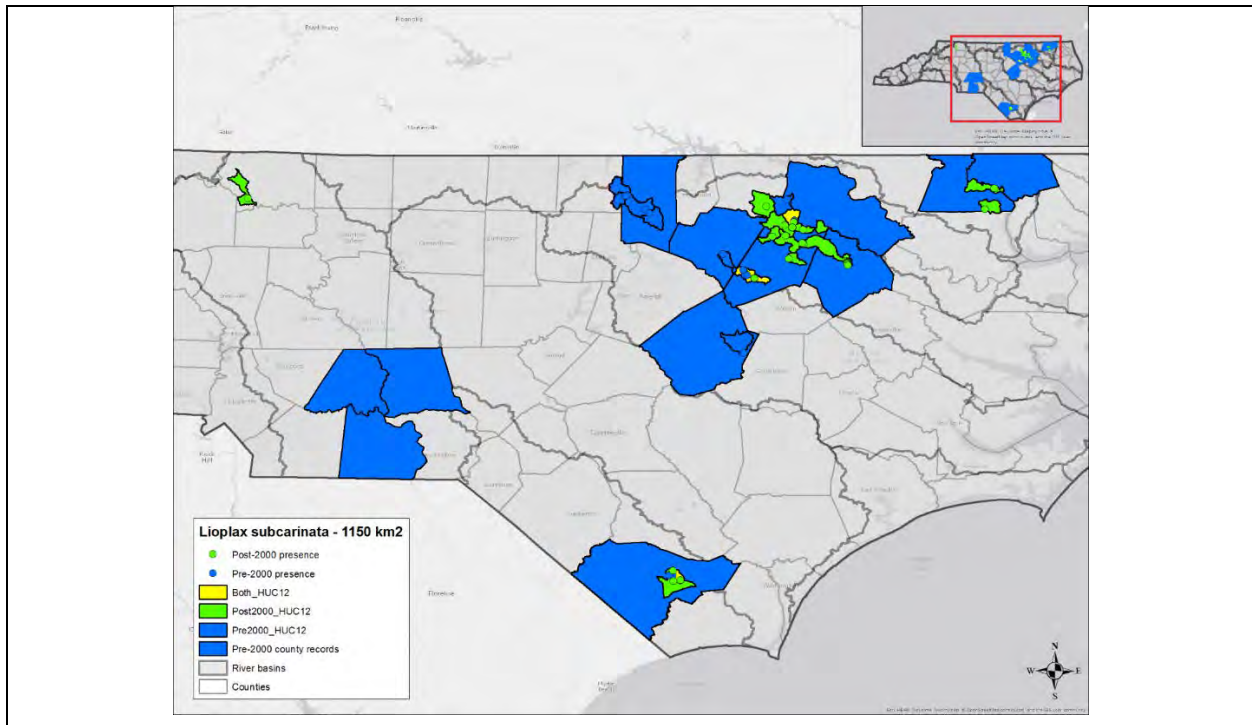
<p>Species Name: Ridged Lioplax <i>Lioplax subcarinata</i></p> <p>Current N.C. Status: Not Listed</p> <p>Proposed N.C. Status: Special Concern</p>	 <p>http://www.fwgna.org/</p>
---	---

Status

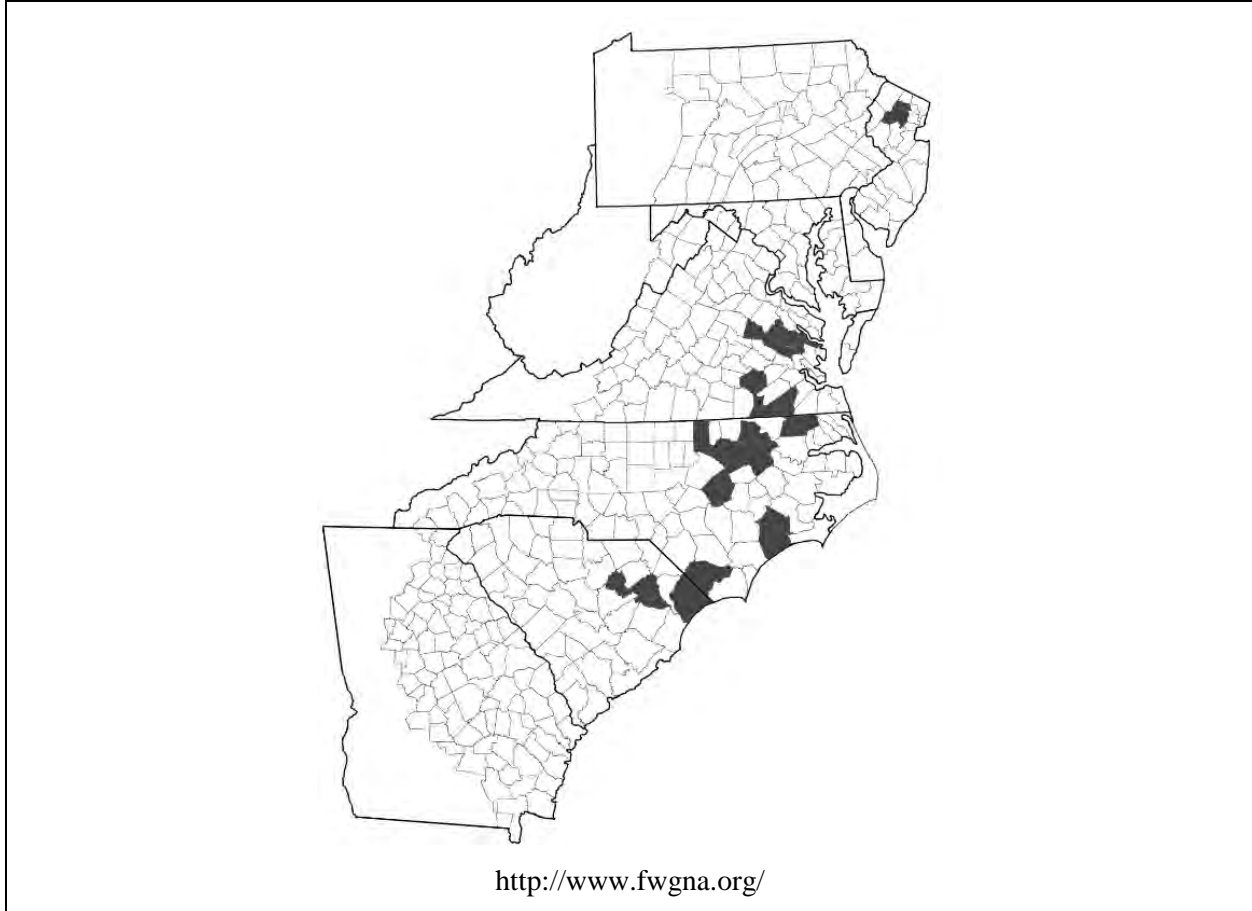
Federal	Not listed
Virginia	Not listed
Tennessee	N/A
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Apparently Secure; State – Vulnerable
IUCN	Least Concern

Range

The Ridged Lioplax is an Atlantic Drainage taxon occurring from New York, southward to South Carolina. In North Carolina, it is known from the Pee Dee, Lumber, Neuse, Tar, and Chowan River basins.



NCWRC Species Listing Abstract



Rationale for Listing

The North Carolina Species Assessment tool ranked this species as Threatened due to an apparent decline in area of occupancy. However, staff consider that there is insufficient data to determine if a true decline has occurred. Since this species is known only to occur in five locations in North Carolina it meets the threshold for Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Roanoke Slabshell
Elliptio roanokensis

Current N.C. Status: Threatened

Proposed N.C. Status: Special Concern



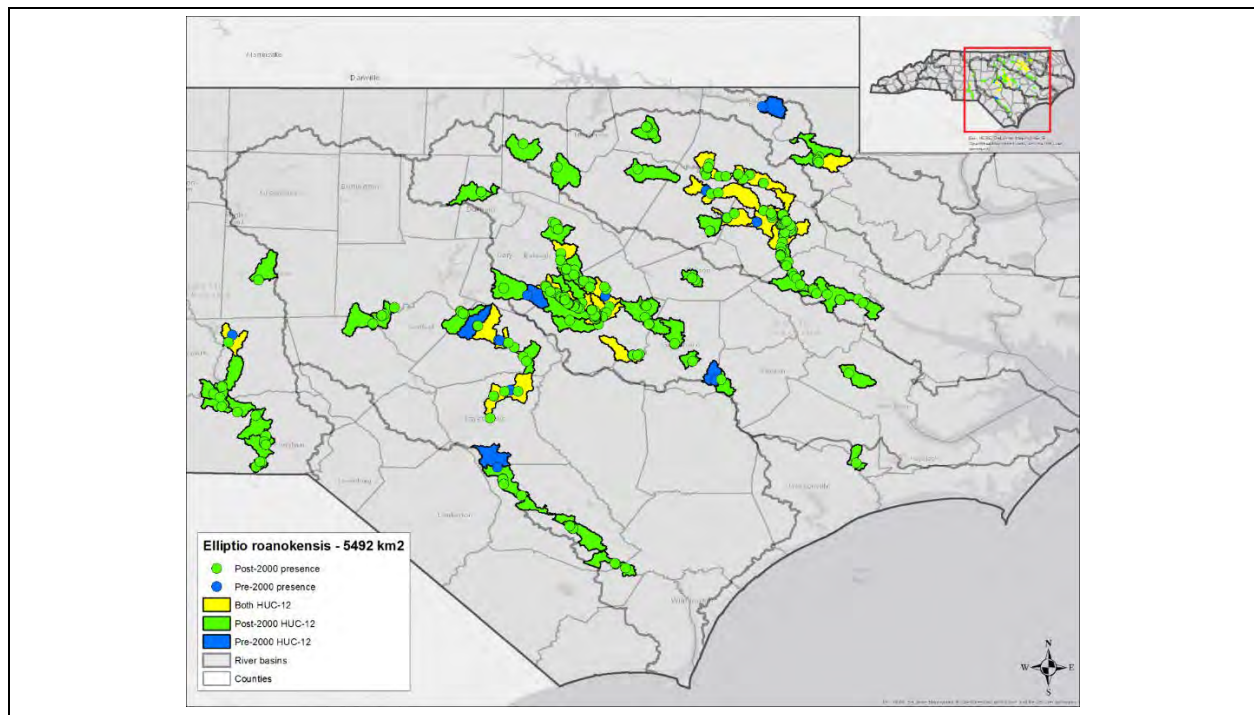
NCWRC

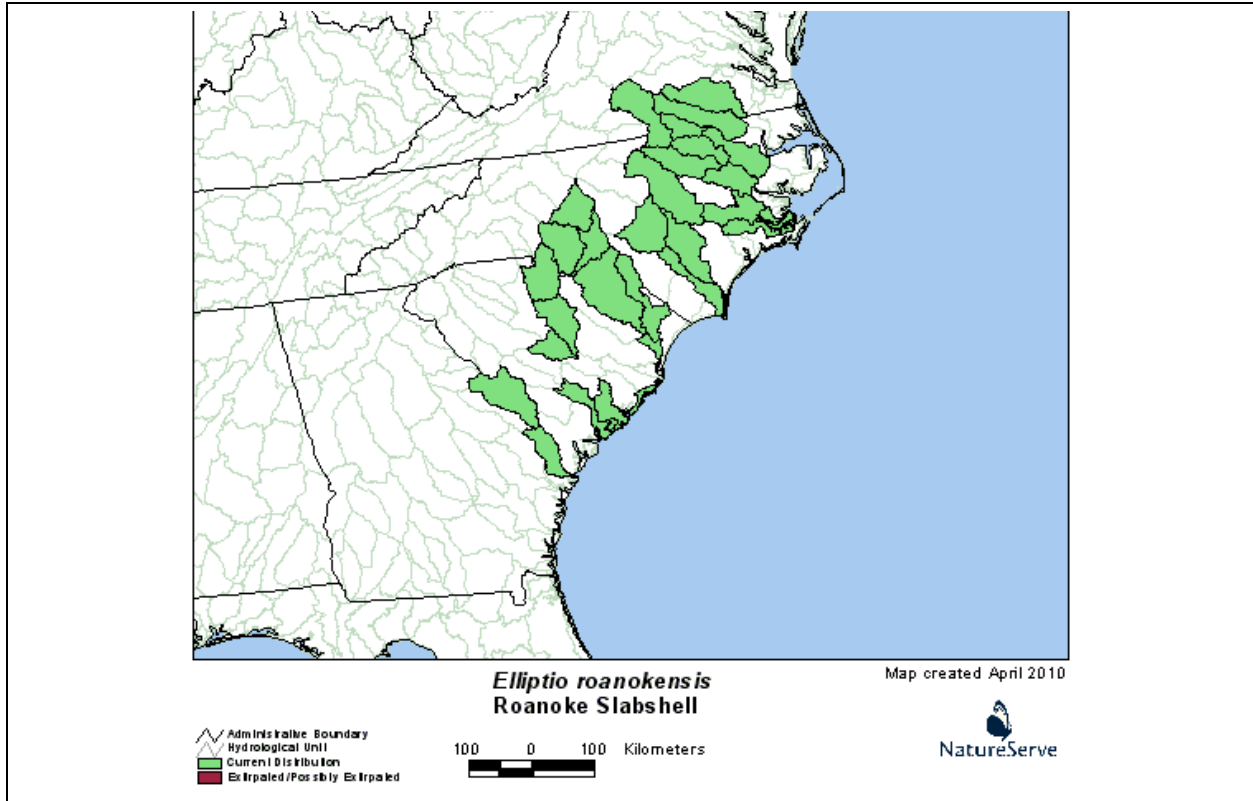
Status

Federal	Not listed
Virginia	Not listed
Tennessee	N/A
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Vulnerable; State – Critically Imperiled
IUCN	Vulnerable

Range

In North Carolina, it is found in the Piedmont and Coastal Plain portions of the Pee Dee, Cape Fear, Neuse, Tar, and Roanoke River basins. The national range includes major Atlantic Slope river basins from the Chowan River Basin in Virginia to the Savannah River Basin in Georgia and South Carolina (including Pee Dee, Congaree, and Savannah but absent from many others).





Rationale for Listing

Recent survey data indicates that it is more common than previously reported. It has been found in relatively high numbers at a number of sites in the main stem Roanoke, Tar, Neuse, Cape Fear, and Pee Dee rivers. Evidence of recent reproduction has been noted in many of these areas. This species was considered rare in the Neuse River in the 1950s; however, in 2010 one site in the Neuse River near Raleigh yielded 424 individuals with a relative abundance (as measured by catch per unit effort; CPUE) of 189.3 individuals per survey hour. Other sites in the Neuse River as well as tributaries Swift Creek and the Little River have also produced fairly large numbers. Similar densities were observed in the Cape Fear River in 2006 and 2008, with 100-400 individuals counted at multiple sites which averaged a CPUE of approximately 100 individuals per survey hour. It is unclear if populations of this species are increasing in numbers or if the previously perceived rarity was a result of survey biases, as this species is often found in deep water habitats that can only be sampled using SCUBA.

This species had a decline in historical area of occupancy of approximately 32% which surpasses the threshold for listing as Special Concern. However, this species now appears to be stable to increasing and may be eligible for delisting in the future.

State Species Assessment Protocol Results

Criterion	Score
A	Special Concern
B	Least Concern
C	Least Concern
D	Least Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Seep Mudalia
Leptoxis dilatata

Current N.C. Status: Threatened
Proposed N.C. Status: Special Concern



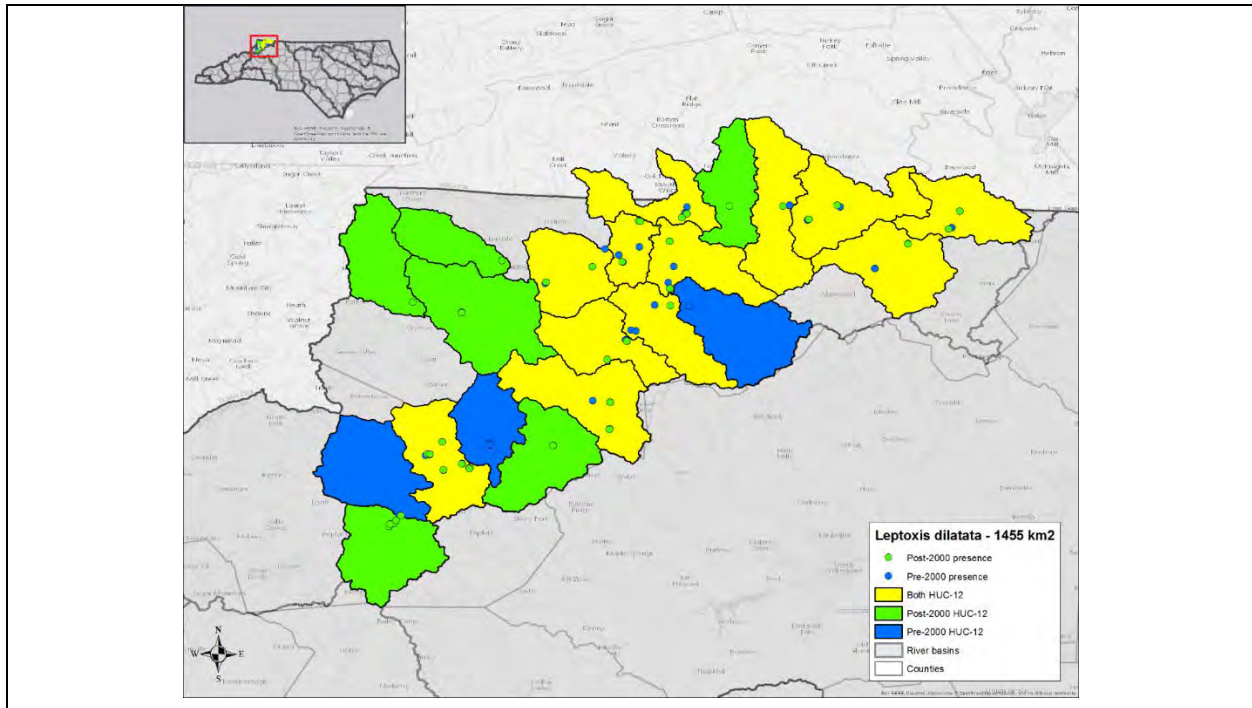
<http://www.conchology.be/>

Status

Federal	Not listed
Virginia	Not listed
Tennessee	N/A
Georgia	N/A
South Carolina	N/A
NatureServe	Global – Vulnerable; State – Critically Imperiled
IUCN	Not assessed

Range

This species has been reported from the Kanawha, Monongahela, and New River systems of Pennsylvania, West Virginia, Virginia, and North Carolina. In North Carolina, it is known only from the New River system in Ashe, Alleghany, and Watauga counties.



NCWRC Species Listing Abstract

No National Range Map Available

Rationale for Listing

Recent surveys have also found the species to be widespread and abundant throughout most of the larger streams in the New River system. The number of locations in North Carolina is less than 5 which surpasses the threshold for Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Least Concern
C	Least Concern
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

<p>Species Name: Waccamaw Lampmussel <i>Lampsilis crocata</i></p> <p>Current N.C. Status: Special Concern Proposed N.C. Status: Not Listed</p>	<p>No photo available</p>
---	---------------------------

Rationale for Listing

The Waccamaw Lampmussel is no longer considered a valid species. It is a synonym for the Yellow Lampmussel (*Lampsilis cariosa*).

NCWRC Species Listing Abstract

Species Name: Carolina Swamp Snake
Seminatrix pygaea paludis

Current N.C. Status: Not Listed

Proposed N.C. Status: Special Concern



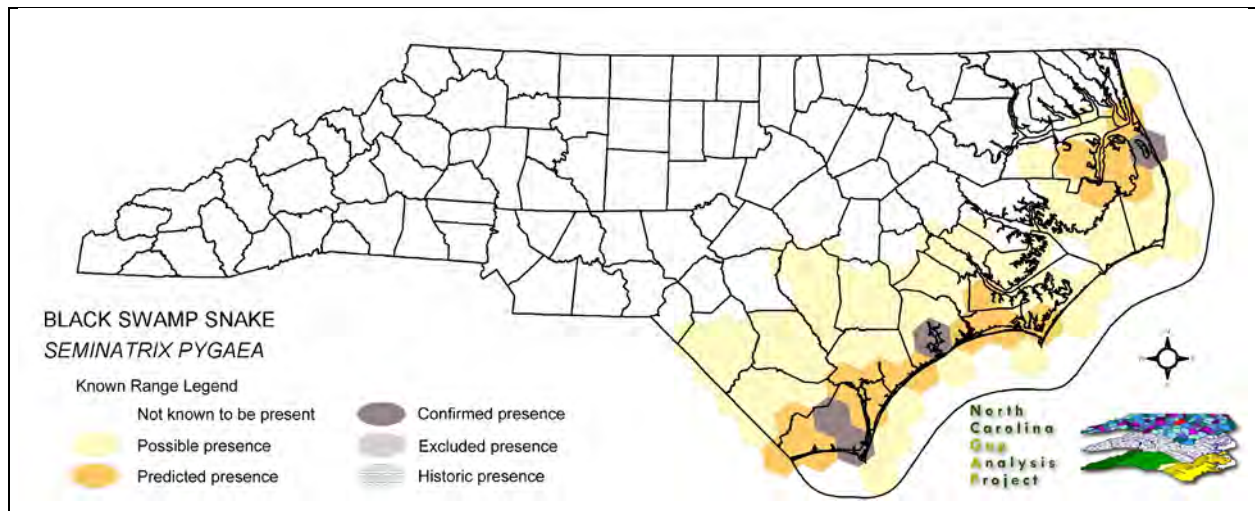
© Jeff Hall

Status

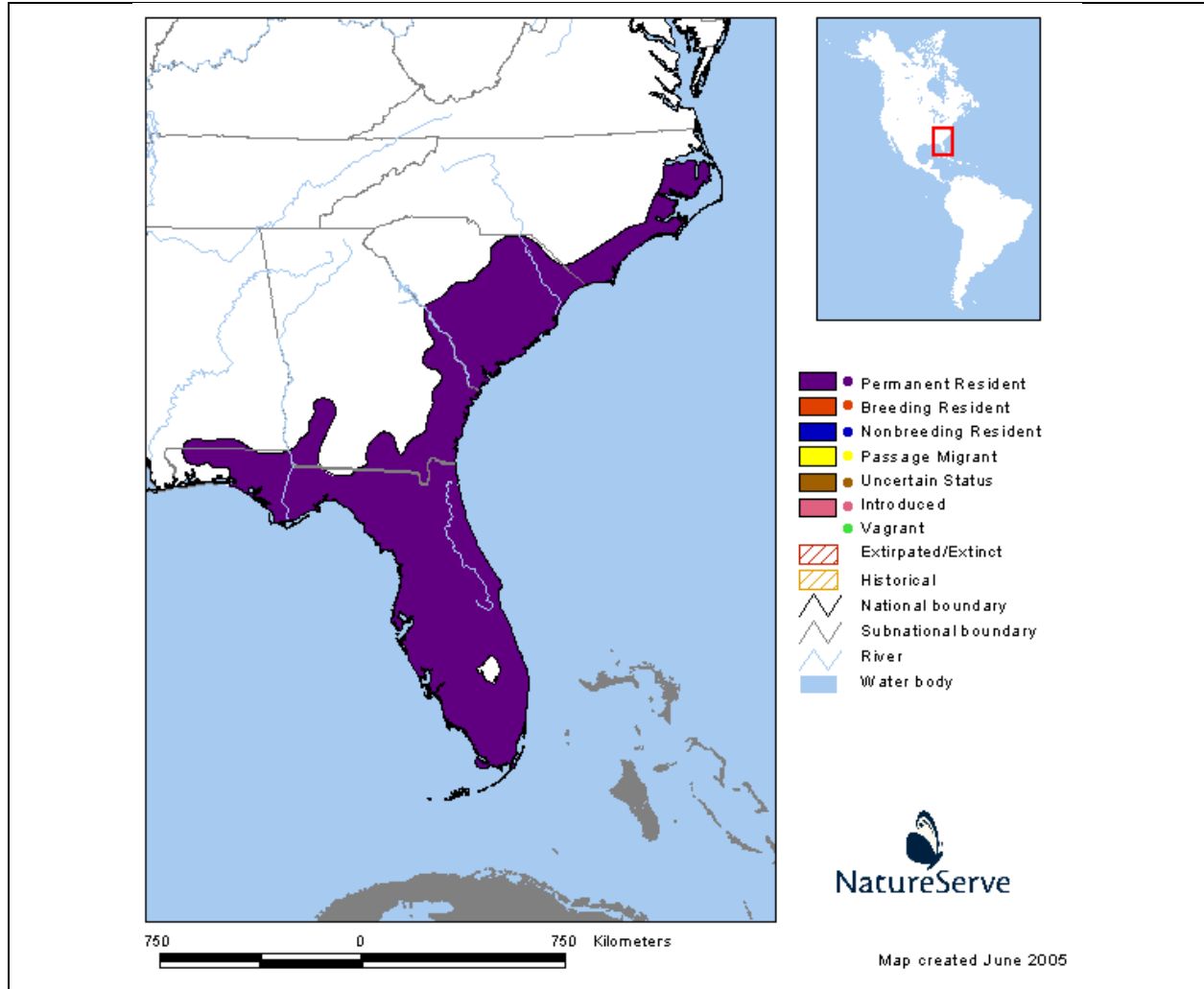
Federal	Not listed
Virginia	N/A
Tennessee	N/A
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Apparently Secure; State – Not assessed
IUCN	Least Concern

Range

The Black Swamp Snake occurs from North Carolina to Florida, and west to southern Mississippi. The Carolina Swamp Snake subspecies occurs only in North and South Carolina. In North Carolina, this taxon occurs in the Outer Coastal Plain and Tidewater regions of Brunswick, Carteret, Craven, Dare, Hyde, New Hanover, Onslow, Pender, and Tyrrell counties.



NCWRC Species Listing Abstract



Rationale for Listing

Found in cypress ponds, swamps and canals, the Carolina Swamp Snake is rarely encountered. Despite active surveys for this species, only a handful of specimens have been detected in the last 10 years. The rarity of this species, coupled with a small area of occupancy, supports a listing of Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Special Concern
C	Special Concern
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Cumberland Slider
Trachemys scripta troostii

Current N.C. Status: Not Listed

Proposed N.C. Status: Special Concern

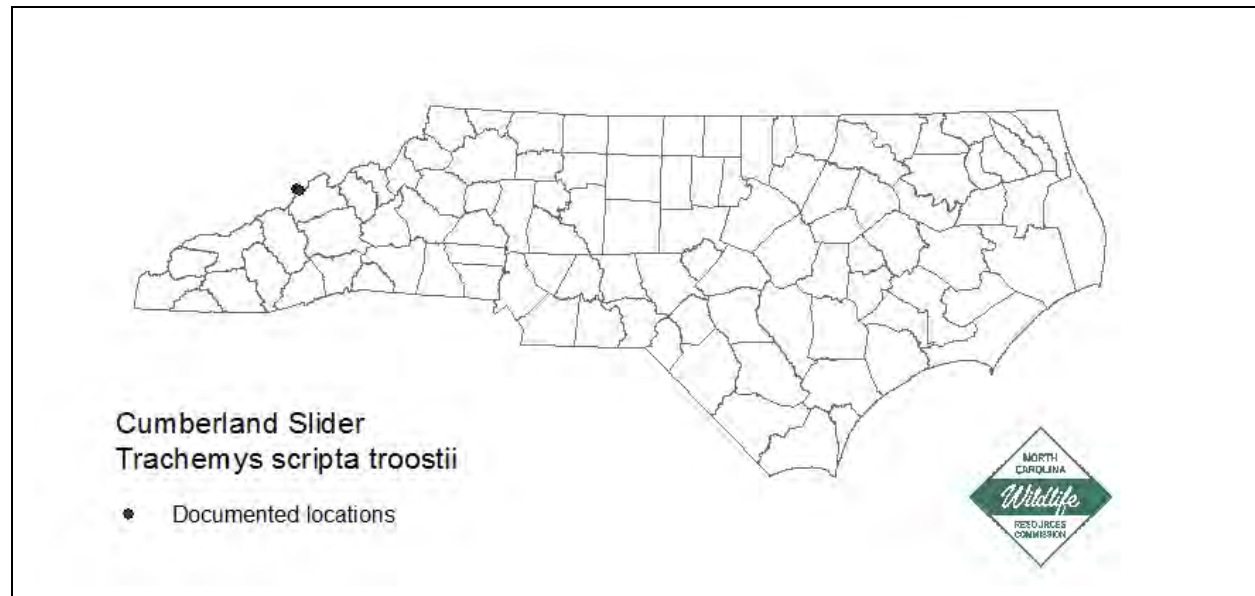


Status

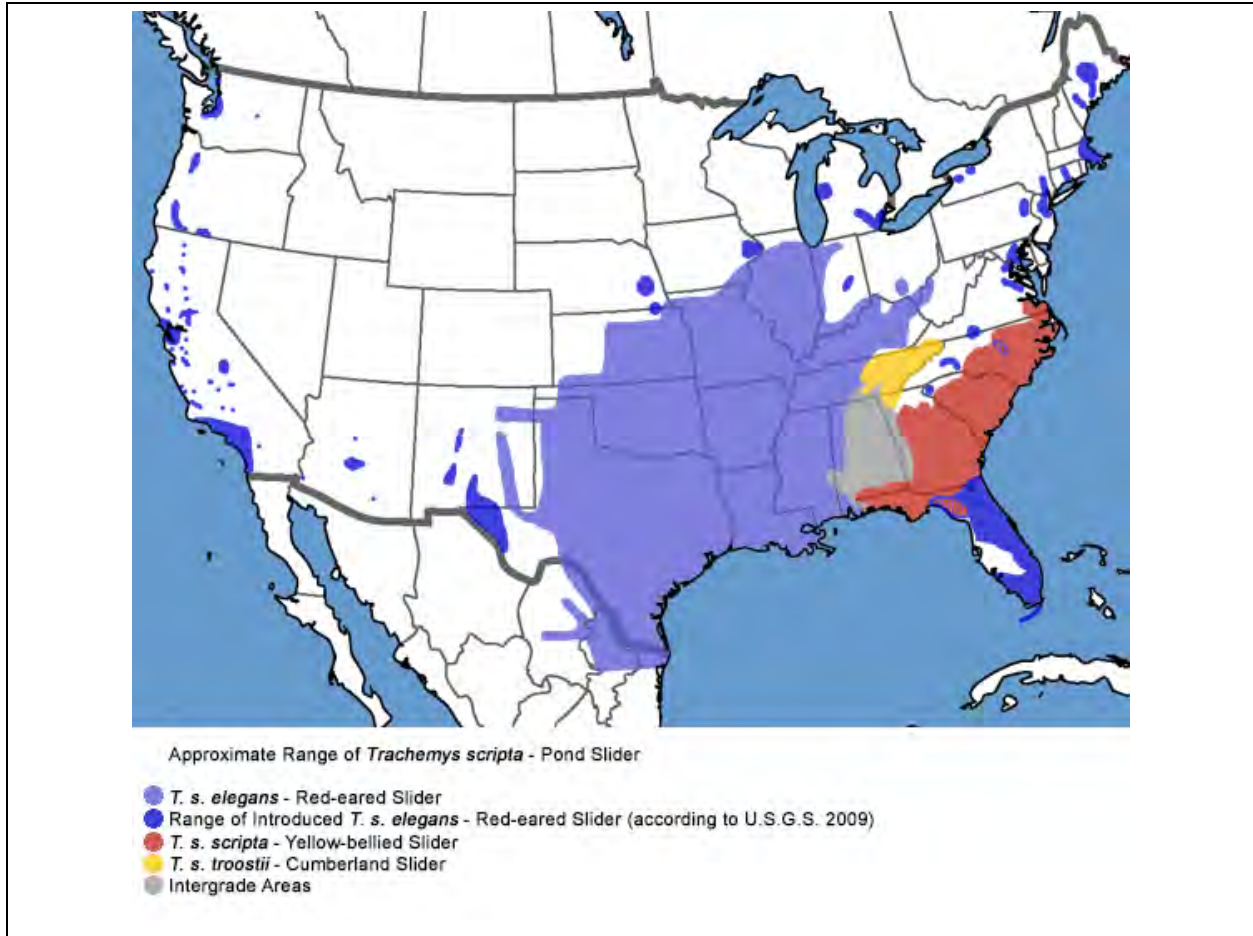
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Apparently Secure; State – Critically Imperiled
IUCN	Sub-species – Not assessed

Range

The Cumberland Slider occurs in the upper portions of the Tennessee and Cumberland River systems in eastern Tennessee, extreme southwestern Virginia, southeastern Kentucky, western North Carolina, and northeastern Alabama. In North Carolina, it occurs in the French Broad River in Madison County at one site, approximately 1 - 3 river miles upstream from the Tennessee border. The NC GAP data does not have a map for the Cumberland Slider, only the full suite of sub-species that fall under *Trachemys scripta*, and even that dataset is not complete.



NCWRC Species Listing Abstract



Rationale for Listing

In North Carolina, the Cumberland Slider is known to occur in the French Broad River in Madison County at one site, approximately 1 - 3 river miles upstream from the Tennessee border. Only six specimens of this turtle have been documented in the state. We are unable to estimate the number of mature individuals because there have not been sufficient surveys targeted at this species. However, surveys to date indicate that it is not a large population. It is very likely that the number of mature individuals is much less than 750, a threshold that the IUCN uses to determine the status of a species. In fact, only 6 turtles have been documented thus far and 5 were juveniles. We do not have any information about declines in this population, but it is the only known population of the Cumberland Slider in the state. That only one small population at risk of extirpation by one negative event (e.g., flooding, collection) is found in North Carolina supports a designation on the state list as Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Data Deficient
C	Data Deficient
D	Special Concern
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Eastern Chicken Turtle
Deirochelys reticularia reticularia

Current N.C. Status: Not Listed

Proposed N.C. Status: Special Concern

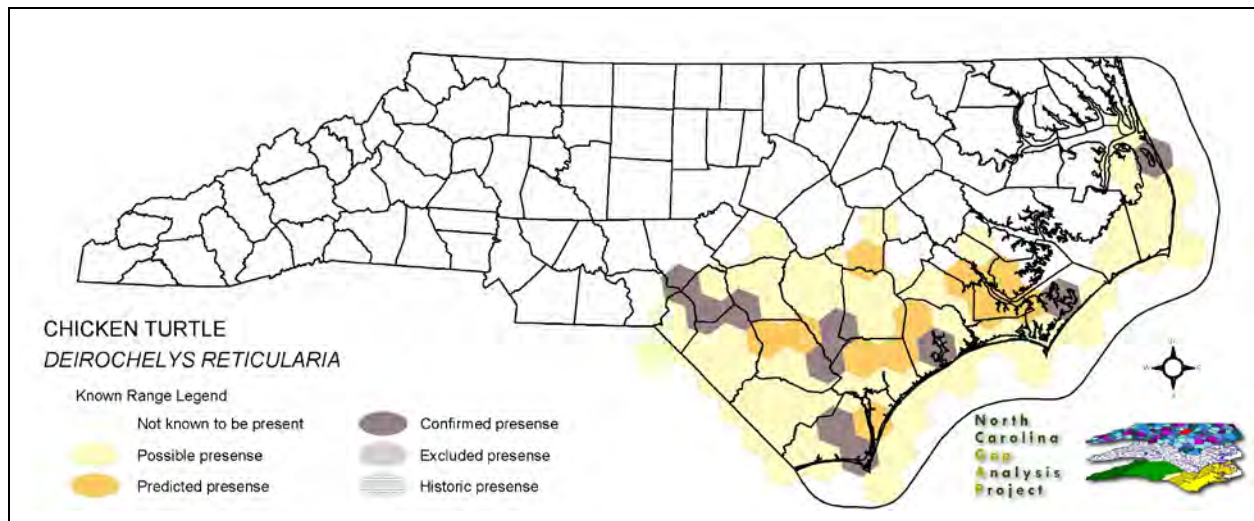


Status

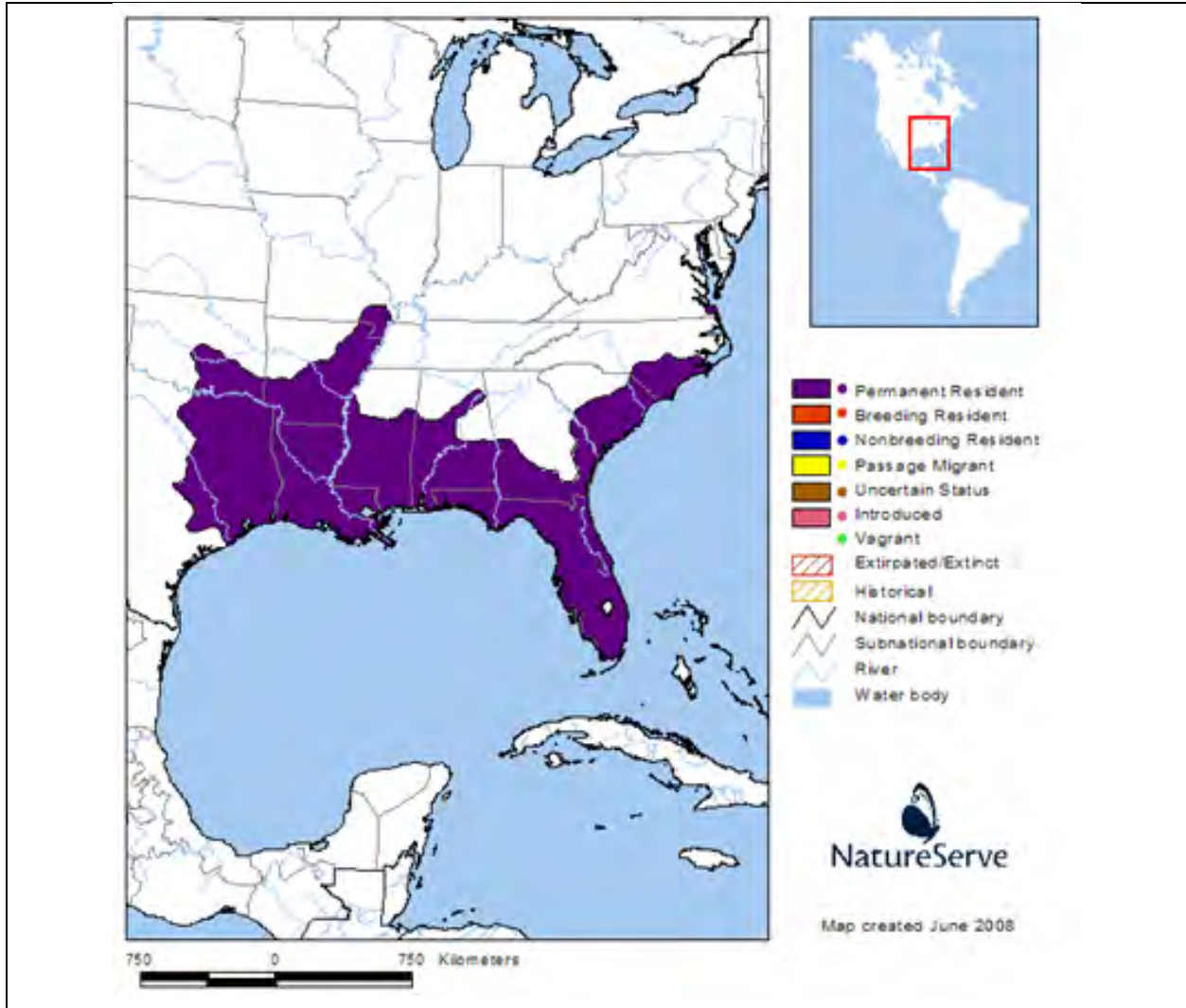
Federal	Not listed
Virginia	Endangered
Tennessee	Not listed
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Secure; State – Not assessed
IUCN	Not assessed

Range

The Chicken Turtle occurs from extreme southeastern Virginia to southern Florida and west to Texas and Oklahoma. The eastern subspecies (*D. r. reticularia*) occurs in the Coastal Plain from extreme southeastern Virginia to northern Florida, and westward along the Gulf Coast to the Mississippi River. In North Carolina, it has been found in 15 counties in the southeastern Coastal Plain and Sandhills including a disjunct population at Nags Head Woods on the Outer Banks in Dare County.



NCWRC Species Listing Abstract



Rationale for Listing

The Eastern Chicken Turtle requires open, isolated wetlands within Longleaf Pine ecosystems found only in the Coastal Plain and Sandhills regions of North Carolina. Recent estimates report >30% loss of these isolated wetlands. Isolated wetlands used by the Eastern Chicken Turtle exist within a highly fragmented landscape. This habitat reduction, combined with isolation of turtle populations due to severe habitat fragmentation, supports a North Carolina listing of Special Concern.

State Species Assessment Protocol Results

Criterion	Score
A	Special Concern
B	Data Deficient
C	Data Deficient
D	Data Deficient
Overall	Special Concern

NCWRC Species Listing Abstract

Species Name: Northern Pine Snake
Pituophis melanoleucus melanoleucus

Current N.C. Status: Special Concern
Proposed N.C. Status: Threatened

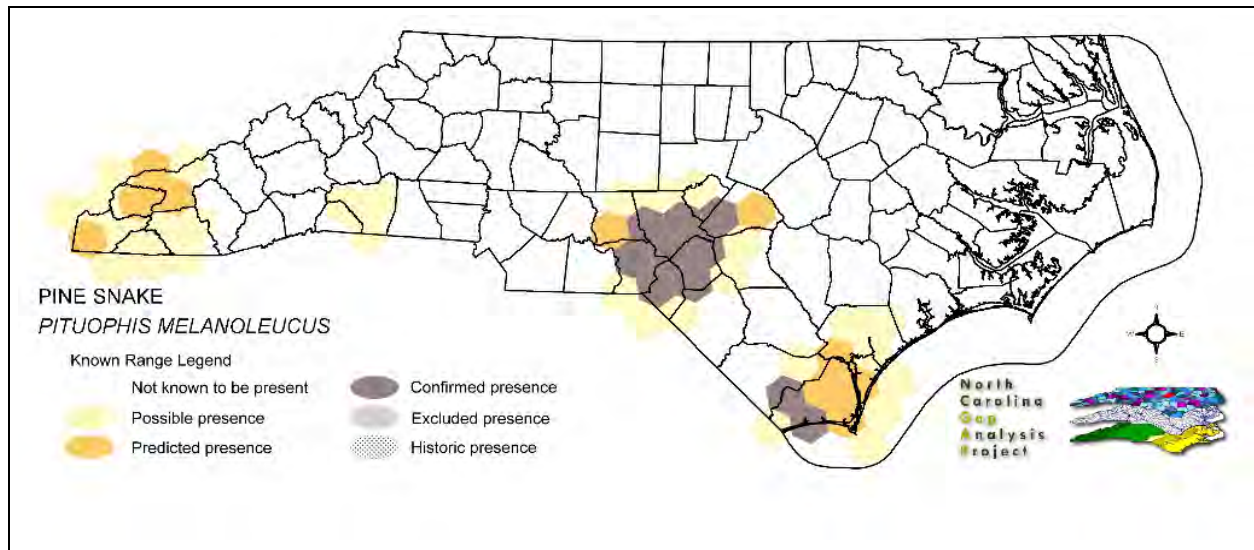


Status

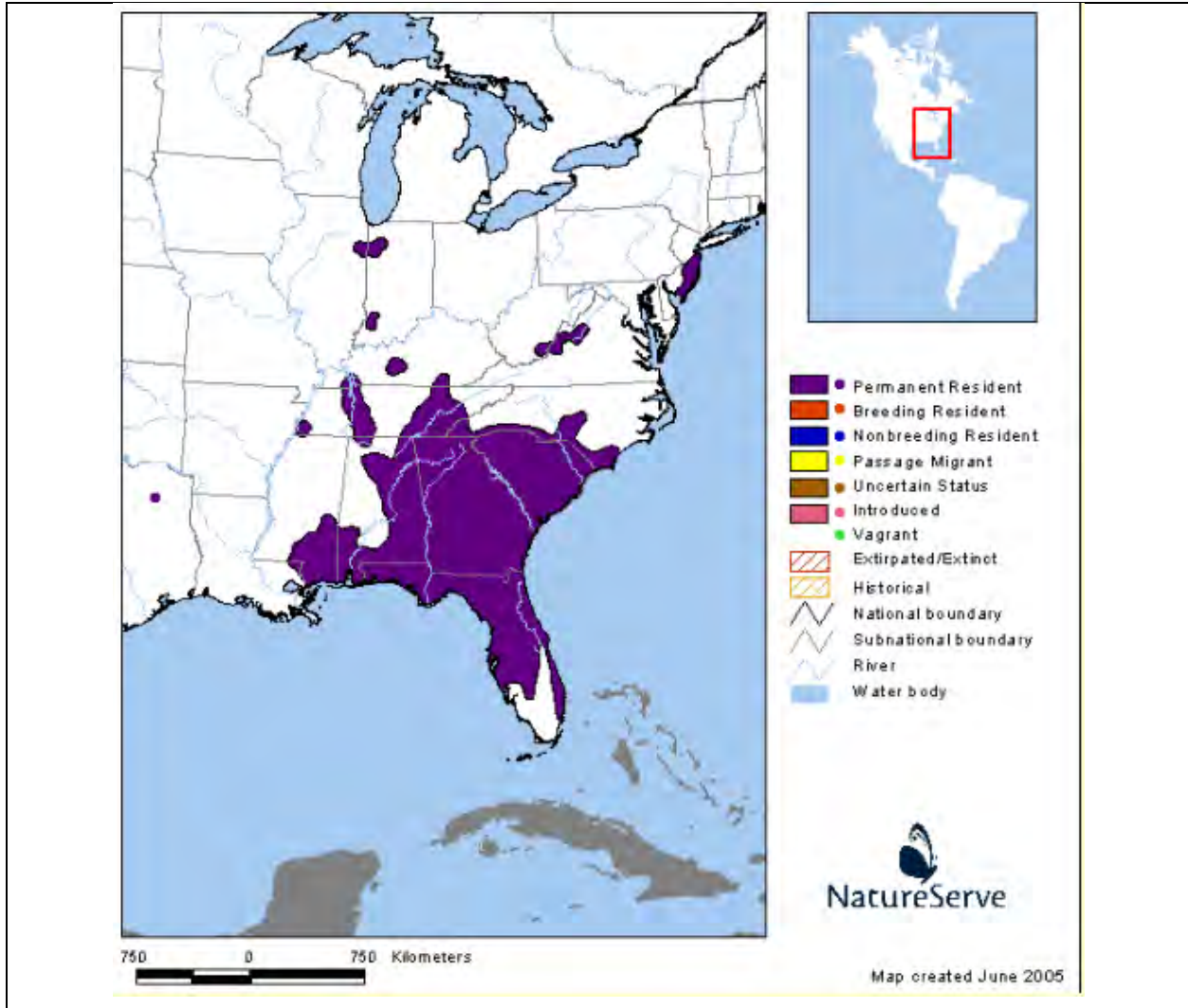
Federal	Not listed
Virginia	Not listed
Tennessee	Threatened
Georgia	Not listed
South Carolina	Not listed
NatureServe	Global – Apparently Secure; State – Imperiled
IUCN	Least Concern

Range

The Northern Pine Snake inhabits xeric uplands in scattered populations in the eastern United States, but mainly in New Jersey and the Southeast. In North Carolina, the most robust populations occur in the Sandhills, but the species also occurs in very small numbers in the western Mountains and in the extreme southern Coastal Plain. The loss of high quality, upland habitat, especially longleaf pine uplands appears to have led to reductions in populations and the range of this species in North Carolina.



NCWRC Species Listing Abstract



Rationale for Listing

Much of the high quality upland habitat that once supported Northern Pine Snakes in North Carolina has been lost to development, fragmented, or poorly managed. The best populations in the state are now confined to the Sandhills region, mainly on publicly-owned land (e.g., Sandhills Game Land). This species is now rarely encountered in the southern Coastal Plain and/or the western part of the state. Continued loss of high quality habitat and fragmentation of landscapes poses a significant threat to remaining populations. Thus, a listing of Threatened for the Northern Pine Snake is supported.

State Species Assessment Protocol Results

Criterion	Score
A	Data Deficient
B	Threatened
C	Data Deficient
D	Special Concern
Overall	Threatened

NCWRC Species Listing Abstract

Species Name: Southern Hognose Snake

Heterodon simus

Current N.C. Status: Special Concern

Proposed N.C. Status: Threatened

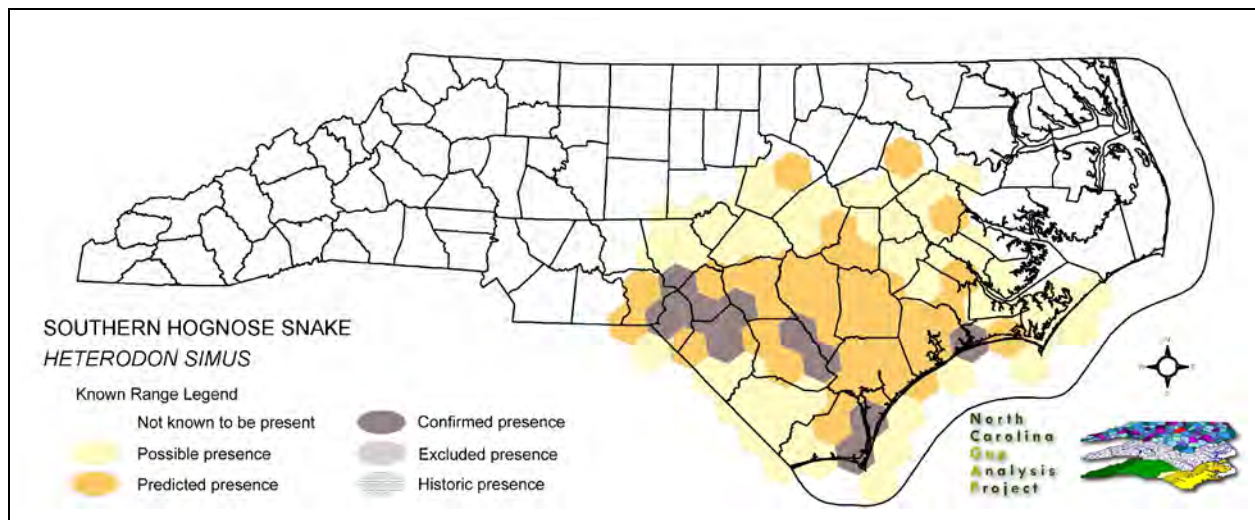


Status

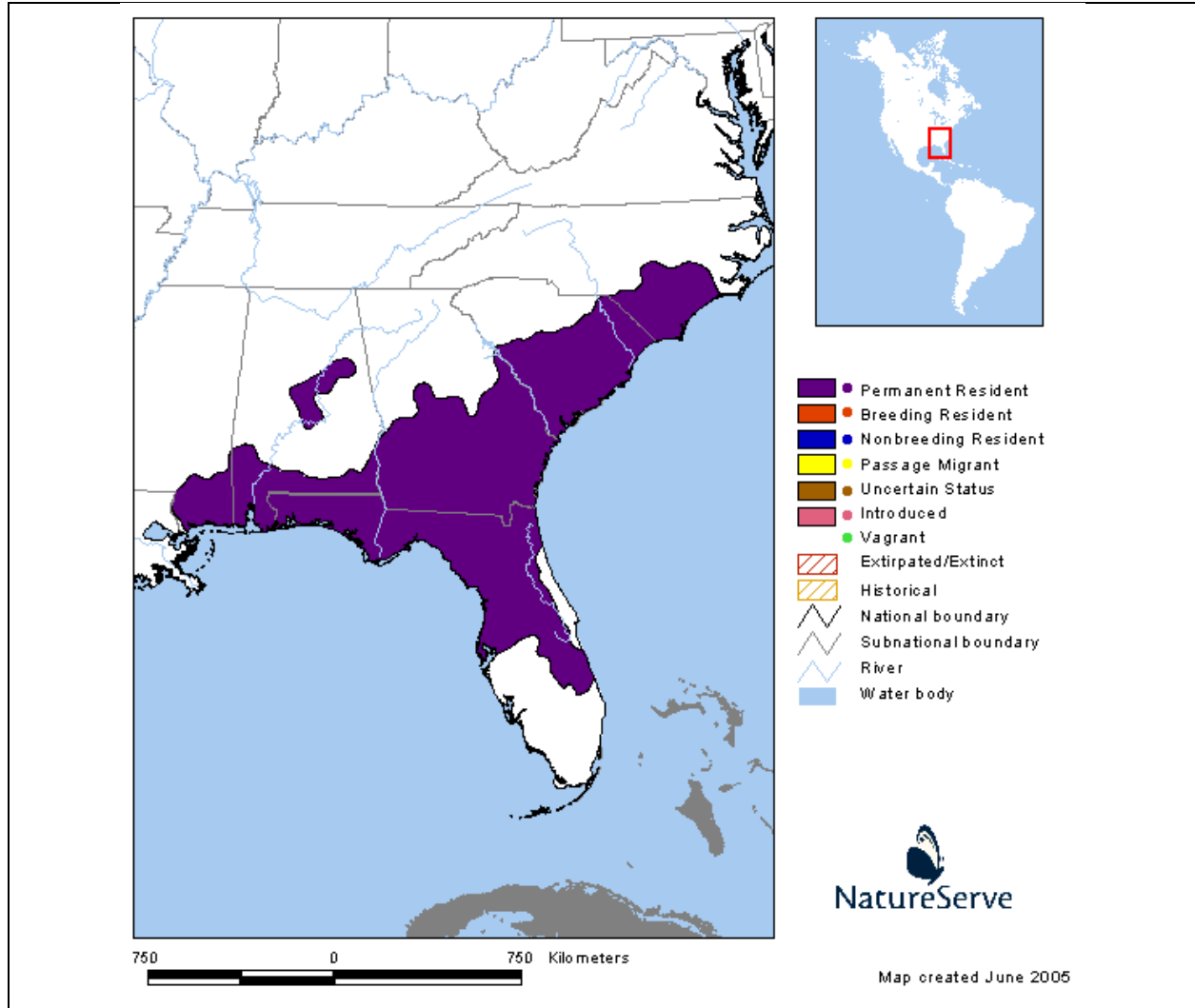
Federal	Not listed
Virginia	Not listed
Tennessee	Not listed
Georgia	Threatened
South Carolina	Not listed
NatureServe	Global – Imperiled; State – Imperiled
IUCN	Vulnerable

Range

Historically, Southern Hognose Snakes occurred from southeastern North Carolina to southeastern Florida and west along the Gulf Coast to southern Mississippi. This snake has not been reported from Alabama or Mississippi since the 1970s and is presumed extirpated. In NC, the Southern Hognose Snake is known from 20 counties, including the southern Coastal Plain, Sandhills, and extreme southeastern Piedmont. However, records are only known from 13 counties since the 1970s, and only nine subsequent to 2000.



NCWRC Species Listing Abstract



Rationale for Listing

The Southern Hognose Snake prefers well-drained, often xeric habitats with substrata of sand or porous sandy loam soils, typically found within a Longleaf Pine ecosystem. As with many Longleaf Pine specialists, this species has shown significant declines both in extent of occurrence and area of occupancy. These declines support a listing of Threatened. Additionally, the regional populations of this species are restricted to isolated patches of xeric woodland habitats that are among the most fragmented in North Carolina.

State Species Assessment Protocol Results

Criterion	Score
A	Special Concern
B	Threatened
C	Data Deficient
D	Special Concern
Overall	Threatened