

Cumberland elktoe in Tennessee is in the headwaters of the Clear Fork system (Call and Parmalee 1981; Bakaletz 1991). The Big South Fork and its many tributaries may actually serve as habitat for one large interbreeding population of the Cumberland elktoe (Service 2003).

*Unit 10. Buck Creek, Pulaski County, Kentucky*

Unit 10 encompasses 58 rkm (36 rmi) and includes Buck Creek from the State Route 192 Bridge upstream to the State Route 328 Bridge in Pulaski County, Kentucky. Buck Creek is currently occupied by the Cumberlandian combshell (Gordon 1991; Hagman 2000; R.R. Cicerello, KSNPC, pers. comm. 2003) and historically supported the oyster mussel (Schuster *et al.* 1989; Gordon 1991).

*Unit 11. Sinking Creek, Laurel County, Kentucky*

Unit 11 encompasses 13 rkm (8 rmi) and extends from the Sinking Creek/Rockcastle River confluence upstream to Sinking Creek's confluence with Laurel Branch in Laurel County, Kentucky.

This unit contains a strong population of Cumberland elktoe (R.R. Cicerello, KSNPC, pers. comm. 2002). This unit is primarily within land owned by the Daniel Boone National Forest, but also includes private lands.

*Unit 12. Marsh Creek, McCreary County, Kentucky*

Unit 12 includes 24 rkm (15 rmi) and consists of Marsh Creek from its confluence with the Cumberland River upstream to the State Road 92 bridge. This unit, which is bounded by lands owned by the Daniel Boone National Forest and private landowners, currently contains the State of Kentucky's best population of Cumberland elktoe (R.R. Cicerello, KSNPC, pers. comm. 2003) and the best remaining mussel fauna in the Cumberland River above Cumberland Falls (Cicerello and Laudermilk 2001).

*Unit 13. Laurel Fork, Claiborne County, Tennessee, and Whitley County, Kentucky*

Unit 13 includes 8 rkm (5 rmi) of Laurel Fork of the Cumberland River

from the Campbell/Claiborne County line upstream through Claiborne County, Tennessee to 11 rkm (6.85 rmi) in Whitley County, Kentucky. The upstream terminus is 2 river miles upstream of the Kentucky/Tennessee State line. A "sporadic" population of Cumberland elktoe currently persists in this area (Cicerello and Laudermilk 2001).

**Existing Critical Habitat**

Approximately 206.5 miles (38 percent) of the proposed critical habitat for the five mussels (within three units) are already designated critical habitat for the yellowfin madtom, slender chub, or spotfin chub (Table 3). The spotfin chub, slender chub, and yellowfin madtom are listed as threatened species under the Act. Our consultation history on these existing critical habitat units is provided in the "Effects of Critical Habitat Designation Section."

TABLE 3.—WITHIN PROPOSED CRITICAL HABITAT DESIGNATION FOR THE FIVE MUSSELS, REACHES AND STREAMS THAT ARE CURRENTLY DESIGNATED CRITICAL HABITAT FOR OTHER FEDERALLY LISTED SPECIES

Unit (unit #)	Species	Reference	Length of overlap (km/mi)
Obed River (3) .....	spotfin chub .....	(42 FR 45527) ..	40/25
Powell River (4) .....	yellowfin madtom, slender chub .....	(42 FR 45527) ..	154/94
Clinch River (5) (and Copper Creek) .....	yellowfin madtom, slender chub .....	(42 FR 45527) ..	142/87.5
Total .....	.....	.....	336/206.5

**Land Ownership**

Streambeds of non-navigable waters and most navigable waters are owned by the riparian landowner. Waters of navigable streams are considered public waters by the States of Mississippi, Alabama, Tennessee, Kentucky, and Virginia. Table 4 summarizes primary

riparian land ownership in each of the proposed units. Approximately 79 percent, 671 rkm (418 rmi), of stream channels proposed as critical habitat are bordered by private lands.

Public land adjacent to proposed critical habitat units consists of approximately 170 km (107 mi) of riparian lands, including the Obed Wild

and Scenic River and the Catoosa Wildlife Management Area in the Obed River Unit (40 km (25 mi)); Daniel Boone National Forest in the Rock Creek, Sinking Creek, and Marsh Creek Units (30 km (19 mi)); and the Big South Fork National River and Recreation Area in the Big South Fork Unit (109 km (68 mi)).

TABLE 4.—ADJACENT RIPARIAN LAND OWNERSHIP IN PROPOSED CRITICAL HABITAT UNITS (RKM/RMI) IN THE TENNESSEE AND CUMBERLAND RIVER BASINS

Critical habitat units	Private	State	Federal
1. Duck River .....	74/46	.....	8/5
2. Bear Creek .....	40/25	.....	
3. Obed River .....	.....	32/20	
4. Powell River .....	154/94	.....	
5. Clinch River and tributaries .....	272/171	.....	109/68
6. Nolichucky River .....	8/5	.....	
7. Beech Creek .....	23/14	.....	
8. Rock Creek .....	11/7	.....	
9. Big South Fork and tributaries .....	44/27	.....	5/3
10. Buck Creek .....	58/36	.....	
11. Sinking Creek .....	8/5	.....	
12. Marsh Creek .....	10/6	.....	