

significant amounts of scarce conservation resources. The present system for designating critical habitat has evolved since its original statutory prescription into a process that provides little real conservation benefit, is driven by litigation rather than biology, forces decisions to be made before complete scientific information is available, consumes enormous agency resources that would otherwise be applied to actions of much greater conservation benefit, and imposes huge social and economic costs. The Service believes that rational public policy demands serious attention to this issue in order to allow our limited resources to be applied to those actions that provide the greatest benefit to the species most in need of protection.

Role of Critical Habitat in Actual Practice of Administering and Implementing the Act

While attention to and protection of habitat is paramount to successful conservation actions, we have consistently found that, in most circumstances, the designation of critical habitat is of little additional value for most listed species, yet it consumes large amounts of conservation resources. [Sidle (1987. *Env. Manage.* 11(4):429–437) stated, “Because the ESA can protect species with and without critical habitat designation, critical habitat designation may be redundant to the other consultation requirements of section 7.”] Currently, only 306 species or 25 percent of the 1,211 listed species in the U.S. under the jurisdiction of the Service have designated critical habitat. We address the habitat needs of all 1,211 listed species through conservation mechanisms such as listing, section 7 consultations, the section 4 recovery planning process, the section 9 protective prohibitions of unauthorized take, section 6 funding to the States, and the section 10 incidental take permit process. The Service believes that it is these measures that may make the difference between extinction and survival for many species.

Procedural and Resource Difficulties in Designating Critical Habitat

With a budget consistently inadequate to fund all of the petition review, listing, and critical habitat designation duties required of us by statute, we have in the past prioritized our efforts and focused our limited resources on adding species in need of protection to the lists of threatened or endangered species. We have been inundated with lawsuits for our failure to designate critical habitat, and we face a growing number of

lawsuits challenging critical habitat determinations once they are made. These lawsuits have subjected the Service to an ever-increasing series of court orders and court-approved settlement agreements, compliance with which now consumes nearly the entire listing program budget. This leaves the Service with little ability to prioritize its activities to direct scarce listing resources to the listing program actions with the most biologically urgent species conservation needs.

The consequence of the critical habitat litigation activity is that limited listing funds are used to defend active lawsuits, to respond to Notices of Intent (NOIs) to sue relative to critical habitat, and to comply with the growing number of adverse court orders. As a result, listing petition responses, the Service's own proposals to list critically imperiled species, and final listing determinations on existing proposals are significantly delayed. Litigation over critical habitat issues for species already listed and receiving the Act's full protection has precluded or delayed many listing actions nationwide.

The accelerated schedules of court ordered designations have left the Service with almost no ability to provide for adequate public participation or ensure a defect-free rulemaking process before making decisions on listing and critical habitat proposals due to the risks associated with noncompliance with judicially-imposed deadlines. This in turn fosters a second round of litigation in which those who fear adverse impacts from critical habitat designations challenge those designations. The cycle of litigation appears endless, is very expensive, and in the final analysis provides relatively little additional protection to listed species.

The costs resulting from the designation include legal costs, the cost of preparation and publication of the designation, the analysis of the economic effects and the cost of requesting and responding to public comment, and in some cases the costs of compliance with National Environmental Policy Act (NEPA), all are part of the cost of critical habitat designation. None of these costs result in any benefit to the species that is not already afforded by the protections of the Act enumerated earlier, and they directly reduce the funds available for direct and tangible conservation actions.

Background

We previously provided information on these species in our Final rule (January 10, 1997; 62 FR 1647). The following presents new information.

The Cumberland elktoe, Cumberlandian combshell, oyster mussel, purple bean, and rough rabbitsfoot are all bivalve mussels (possessing a soft body enclosed by two shells) in the family Unionidae. Unionid mussels, in general, live embedded in the bottom (mud, sand, gravel, cobble/ boulder substrates) of rivers, streams, and other bodies of water. These mussels siphon water into their shells and across four gills that are specialized for respiration. Mussels are known to consume detritus (organic decomposed debris), diatoms, phytoplankton, zooplankton, and other microorganisms (*i.e.* bacteria and algae) (Coker *et al.* 1921; Churchill and Lewis 1924; Fuller 1974).

Sexes in unionid mussels are usually separate. Males release sperm into the water; the sperm are then taken in by the females through their siphons during feeding and respiration. Eggs are held in the gills of the female where they come into contact with the sperm. Once eggs are fertilized, females retain them in their gills until the larvae (glochidia) fully develop. The change (metamorphosis) of the larvae of most unionid species into juvenile mussels requires a parasitic stage on the fins, gills, or skin of a fish. Late stage mussel glochidia are released into the water column and they must find and attach to a suitable host fish in order to develop into a juvenile mussel. Glochidia may be released separately or in masses termed conglomerates. Developed juvenile mussels normally detach from their fish host and sink to the stream bottom, where they continue to develop, provided they land in a suitable substrate with correct water conditions. Consequently, unionid mussels are specialized to only parasitize one or a few suitable host fish that occupy similar habitats as the mussels.

These 5 mussels are historically native to portions of the “Cumberlandian” Region of the Tennessee and Cumberland River Systems. The Cumberlandian Region, considered to be the center of freshwater mussel diversity in North America, historically contained over 100 species, 45 of which were found nowhere else (Starnes and Bogan 1988; Parmalee and Bogan 1998; Cicerello and Lauder milk 2001). The Cumberlandian Region encompasses the Cumberland River and its tributaries downstream to the vicinity of Clarksville, Montgomery County, Tennessee; the Tennessee River and its tributaries downstream to the vicinity of Muscle Shoals, Colbert and Lauderdale Counties, Alabama; the Duck River (Tennessee River system)