

TRANSLOCATION OF CUMBERLANDIAN MUSSELS TO ACHIEVE SPECIES CONSERVATION¹

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Abstract Text: Surveys conducted since 2003 indicate that some rare mussel species in the Clinch and Duck rivers are in a strong faunal recovery period and can serve as both nursery stock sites as well as receiving streams for the translocation of rare and federally endangered freshwater mussels. Our objective is to preserve the biological diversity of Tennessee's native freshwater mussel fauna by collecting adult mussels from the Clinch and Duck Rivers in Tennessee. Individuals collected are translocated into the Duck, Nolichucky and Big South Fork Rivers for restoration of extirpated species within their historical habitat and augmentation of populations that are at low levels. Adult mussels are also collected for natural history research and propagation purposes. The effort supports a long-term commitment involving The Nature Conservancy and state and federal agencies to achieve the objectives of the "Plan for the controlled propagation, augmentation and reintroduction of freshwater mollusks of the Cumberlandian Region" produced by the Cumberlandian Region Mollusk Restoration Committee. The desired long-term result is to restore populations of endangered freshwater mussel species within historical habitats of the Duck, Nolichucky and Big South Fork Rivers with viable populations such that de-listing or down-listing of some species can occur. Without increased emphasis on species propagation, translocation to suitable habitats, and augmentation of current populations, many of these species face an increased risk of decline or extirpation.

Additional Keywords: Mussels, translocation, Cumberlandian, endangered species, restoration

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