c. Hairy Rattleweed

Found within a 125-square-mile area in South Georgia, the hairy rattleweed is a perennial legume that is entirely covered in hairs. The species is primarily restricted to open, sandy areas and prefers higher and drier sites. The hairy rattleweed is found within the Refuge and is considered Endangered throughout its entire range. The rattleweed is negatively impacted by clear cutting, soil compaction resulting from heavy machinery, and inconsistent fire regimes. Should the hydrological regime change within the Refuge, however, fire intensity and frequency could increase, potentially exposing the species to unnatural burns. Florida hartwrightia (ESA candidate); floodplain tickseed (ESA candidate); purple honeycomb-head (ESA candidate); and white fringeless orchid (ESA Threatened) are also sensitive to soil disturbances and could be similarly affected by mining operations and an altered hydrological cycle.

d. Florida Panther

As one of the two apex predators that historically roamed the Southeast, the Florida panther was heavily persecuted for centuries. By the time the ESA was legislated, the species had been lost throughout virtually its entire range and only a handful of individuals clung to existence in South Florida (the last Georgian panther was killed in the Okefenokee Swamp in 1925). Thanks to tireless conservation efforts, those individuals were saved, and the population has since grown to an estimated 120–230 adults and subadults. In a major conservation milestone, females with kittens were also recently documented north of the Caloosahatchee River, which has long been a major barrier to panther dispersal and range expansion.

Despite this progress, however, the species (ESA Endangered) is still threatened by habitat loss and fragmentation, roadway mortality, and long-term challenges posed by a lack of genetic diversity and human acceptance. For the panther to even be considered for reclassification under the ESA, the species must overcome pervasive habitat fragmentation and establish a second core population north of Interstate 4, with gene exchange between subpopulations. Because natural recolonization may prove unattainable, researchers have examined several potential reintroduction sites, and concluded that, of the nine areas that were identified, Okefenokee National Wildlife Refuge, Ozark National Forest, and Felsenthal National Wildlife Refuge regions had the highest combination of effective habitat area and expert opinion scores.[232] The Florida Game and Freshwater Fish Commission (now Florida Fish and Wildlife Conservation Commission) moreover conducted a Florida Panther Reintroduction Feasibility Study and concluded that reintroduction of the Florida panther within the greater Okefenokee ecosystem is biologically feasible.[233]

Florida panthers have not yet established a presence in the greater Okefenokee ecosystem, nor are reintroduction efforts currently being considered. Nonetheless, were mining to commence along the Refuge boundary, Trail Ridge's upland habitat—the preferred hunting

[232]Thatcher, Cindy & Manen, Frank & Clark, Joseph. 2009. A Habitat Assessment for Florida Panther Population Expansion into Central Florida. Journal of Mammalogy.

[233] Belden, R. C. and J.W. McCown. 1996. Florida panther reintroduction feasibility study. Game and Fresh Water Fish Comrn., Bur. Wildl. Res. Final Rep. 70pp.