Limitations of captive breeding

Environment, Animals

Biology 320 Dr. Nissen 08 November 2012 Limitations of Captive Breeding While the use of captive breeding has grown enormously in the more recent years there has been a complete lack of attention paid to the limitations placed on that endangered species by the captive breeding programs. Limitations such as establishing self-sufficient captive populations, poor success in reintroductions, high costs, domestications, preemption of other recover techniques, disease outbreaks and maintaining administrative continuity have all been significant (Snyder et al. 996). We will review the self-sufficient captive populations, reintroductions, and domestications, these are among the most important limitation factors for the review. Establishing self-sufficient captive populations obtaining consistent reproduction and survivorship under captive conditions has proven quite difficult with many species. There are a variety of reasons as to why there has beenfailureto breed well in captivity, and identifying these factors can be difficult and are still unknown even after many years of experimentation.

Because of poor reproduction the self-sustaining captive populations may never be achieved for some of the endangered species (Snyder et al. 1996). In a recent review of 145 reintroduction programs of captive-bred animals, largely vertebrates, only 11% of the cases were successfully reintroducedinto the wildpopulations (Beck et al. 1994). The causes of the reintroduction failure of the captive bred animals vary from a failure to correct the factors originally causing significant behavioral deficiencies in the released animals, to social behavior.

The behavioral issues are typically seen in the animals that lack the opportunity to associate with wild individuals in a natural setting during the

critical learning periods. Many of the problems affecting captive preservation and reintroduction of endangered species are results of genetic and phenotypic changes that occur in captivity as well (Snyder et al. 996) and this directly affects the domestication of the captive-bred animal. The implications of the progressive genetic and phenotypic changes are more serious than recognized for the species in long-term captive breeding. Because of progressive domestication the general expectation that one can “ preserve” endangered species in captivity without significant change over a long period of time should be abandoned (Snyder et al. 1996).