

Addendum #2 to 2007 Guidelines of the American Society of Mammalogists on the use of wild mammals in research—approved June 2010

Release of Captive Mammals

Many projects require capture and maintenance of wild mammals in captivity for varying lengths of time. The release of animals that have been held in captivity for more than a short period should be considered carefully. Release of captive animals might be justified in the case of endangered/threatened species or species of special concern due to population levels or population dynamics, or for individuals held for only short periods. Research designs that require release of captive animals as part of a manipulation must be planned to minimize potential impact on the local population and stress to the released individuals.

Concerns regarding release of individuals held in captivity for more than short periods include:

- Introduction of individuals into an area without available dens and resources (especially problematic with highly territorial species)
- Alteration of population genetics
- Introduction of individuals not acclimated to the local environment
- Introduction to wild populations of pathogens acquired in a captive environment
- Stress on local populations and released individuals
- Excessive exposure to predation of released individuals due to inappropriate foraging cycles (entrained by captive light cycles or environments), extensive foraging due to not having caches built up for winter months, or lack of familiarity with local resources
- Disruption of social systems
- Animals losing or not learning foraging skills
- Legality of reintroduction of captive animals (varies with state and country)

Decisions on release and permissible captivity duration before release are often species specific and must be made on a case-by-case basis. Holding individuals of a given species for one or a few days to recover from surgical implantation of a transmitter or data logger is usually appropriate. In contrast, release of highly territorial species held for even short periods into the same environment from which they were captured can be problematic because vacant territories can be usurped and reintroduction of the resident virtually guarantees a conflict that would not have occurred had the resident not been removed. For additional information regarding the potential release of marine mammals, investigators are referred to the best practices for these taxa developed by the National Marine Fisheries Service (http://www.nmfs.noaa.gov/pr/pdfs/health/release_guidelines.pdf). Final disposition of captive animals is of concern, but the integrity of natural populations must be the highest priority in project design and IACUC deliberations.