



**Successful Hand-rearing and Rehabilitation of North American River Otter
(*Lontra canadensis*): Hand-rearing and Release Techniques to Maximize Chance
of Success.**

Section 3 – Otter Release, Resources, and Suggested Reading

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This document, a compilation of advice from multiple individuals with otter rehabilitation experience, is designed to provide guidelines and techniques of river otter care for licensed wildlife rehabilitators or wildlife care centers that may be unfamiliar with this species. Due to its length it has been divided into 3 Sections.

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Otter Release

OTTER RELEASE PREPARATION

- Generally the release age is at 8 - 12 months which is their average normal dispersal age.
- Release criteria includes: demonstration of efficient fishing, swimming, and prey recognition skills; proper hunting response to natural food items; appropriate fear response to the appearance of humans; appropriate caution, and avoidance of perceived dangers.
- Pups should be healthy, in good body condition, have waterproof coats, at a sufficient weight (6.8 - 9.0 kg), and free from external and internal parasites.
- Prepare otters by offering food items (such as crayfish, minnows, carp, brim, catfish, trout, frogs, worms, grubs, freshwater clams) that would be found in the proposed release site to help facilitate prey recognition.
- Multiple pups generally can be released slightly younger (8 - 10 months old) than single pups (10 - 12 months old). Because of their social nature, they tend to remain together after release and are less likely to get lonely, frightened, or bored prompting them to seek out the rehabilitator. Also there is safety in numbers as a potential predator may hesitate before going after multiple river otters.
- Although the hunting instinct is naturally strong for these animals and does not have to be taught, the actual act of successfully and consistently catching a live swimming fish in open water must be practiced extensively.
- A major consideration for releasing towards the earlier end of the age range is that the confines of a prerelease pen poses severe limitations on what the otters might otherwise discover, learn, and perfect in their natural environment. The slow release from a feeding station should provide backup care for as long as it takes the individual to master these life skills. Their fishing skills require speed, conditioning, and accuracy as well as the ability to identify and capture a variety of prey items.
- Although these skills are mastered to some degree in the confines of a pool, it does not compare to the challenges found in an unpredictable river. However, the experience does provide some assurance that the pup could acquire food in the unlikely event that it chooses not to use or inadvertently gets separated from the feeding station.

RELEASE SITE CRITERIA

- One of the difficulties of release with any species is finding an appropriate release site that meets optimal criteria. The foremost criterion is that the site must be an environment that is appropriate for the target species providing proper habitat, food, water, shelter, and a viable population of conspecifics (see next point).
- Ideal site criteria for otters include good water quality, no serious pollution, isolation from humans, safe distance from roadways, and current suboptimal otter population.



- Whether or not an area has a viable population can be difficult to determine. Although the released animals need to be in an area with conspecifics, too many may pose a risk for overcrowding and/or territorial disputes resulting in aggression that may result in injury, death, or the need for rescue again.
- Releasing rehabilitated animals back to the same geographical area from which they came is a good practice unless the area is suboptimal (e.g. recent increase in human presence, new road, etc.). Adult otters should almost always be returned to their established home range.
- If the otter originated from an unknown location and needs to be translocated, seek advice from local and state wildlife population biologists as to the current status and ranges to help determine potential quality release sites.
- Although the welfare of the individual animal is a wildlife rehabilitator's primary goal, consideration of the possible impact these translocations pose to the health of the current population also must be considered.
- When selecting release sites be sure to have the landowners permission when you are considering crossing over or releasing on private land.
- If using a slow release (or hacking technique) with a hand-reared animal the site also must be close enough to allow a care taker to maintain daily checks and a consistent feeding schedule as needed.



Release days at the river

BEST TIME FOR RELEASE

- Critical factors such as time of day, season, migration patterns (from one water source to another), weather, potential predators, and proximity of territorial individuals should be considered as they may have an effect on the immediate outcome.
- Release in the early morning, which corresponds with their natural period of activity, on a day with good weather and little or no chance of rain or storms for several days. This provides the animal with the optimal amount of daylight hours in calmer water to explore before nightfall.
- The best time of the year to release depends on geographic climate (release before water ways freeze over), legal trapping season (afterwards or "months before" to allow



otters time to acclimate) and before otter whelping season (maternal adult females can be extremely territorial).

- Even in the cold northern latitudes, a fall release is often preferred to waiting until the following spring as the otters tend to do quite well with the colder temperatures and procuring food in partially frozen water may actually be easier due to the slower movement of frogs and fish.
- Keeping the pup over the winter may seem well meaning but in fact could lead to otherwise avoidable problems (self induced injury from escape attempts, taming of animal, injury from a protective wild female with weaning or weanling pups of her own).

RELEASE PROCESSES

- Regardless of the timing and location of the animal(s) release, a soft release is the preferred method for hand-reared river otters.
- There are nearly as many release techniques as there are rehabilitators and published river otter methods range from the strict hands off (otters are raised, housed and released wild) to extensive hands on approaches (rehabilitator takes on maternal role).
- Below are a few summarized methods (references included for further reading).
- Some rehabilitators utilize **hack cages** at the release site. This method involves building a temporary enclosure at the release site and housing and feeding the otter there for 1 to 3 weeks prior to release. Once the door is open, food is provided daily in the cage until no longer needed. Some otters only return for several days while some will take longer. (Blaisdell, Green)
- Others provide **daily back up food at the release site** until no longer necessary. Some otters move on rather quickly while others may linger for months or even take up a permanent territory near the release area. The author has had otters return to the hack site when they became sick or injured so daily visits by the caretaker to the release site serves as an important opportunity to observe the animal's condition as well as to provide food. Otters can be trained to respond to a whistle call (by whistling prior to every feeding starting with formula) that they learn to associate with feeding time and the feeding station location in order to assure that the released otters are the animals to actually receive the food. This also allows for visual inspection of the animals in order to assist with post release monitoring. Utilizing an audible feeding signal, such as a whistle, also serves as a safety factor for the otter since it establishes an association with food to a very particular cue rather than to the mere sight or sound of a human. This can reduce or eliminate instances in which an otter may approach a stranger in search of food after release. (Haire)
- Introducing the otter to the release site multiple times prior to release can give the animal the advantage of becoming familiar with the area and its waterways thus locating safe hiding places, sleeping dens, food and hunting spots as well as providing them with chances to practice fishing prior to being left on its own. To accomplish this, it is best to start when the animal is young enough (less than 5 months old) to still be trusting of, and dependent on the care giver. This increases the chance that the animal



will remain with the rehabilitator as they explore the outside world and then later return home together. (Beckwith, Blaisdell, Caine-Stage)



Left: Feeding/hack station at release site



Right: Well used otter slide/path at release site leading from river to feeding station.

NON-RELEASABLE OTTERS

If multiple attempts to release an individual fail or the otter has a health condition, injury, or handicap that deems him non-releasable, permanent placement in captivity can be attempted. It may be possible to place a non-releasable otter in a zoo or nature center as they attempt to accommodate these animals by integrating them into the zoo-bred population. As with many animal species, non-releasable hand-raised otters tend to adjust better in long term zoo, aquarium, or wildlife centers than wild caught adults.

Contacting potential non-releasable otter facilities should be done as early as possible to allow for the best possible placement. Remember to contact your regulating state wildlife agency in regards to the policies of wildlife transport across state borders.

SOURCES/SUPPLIES:

Enfamil™ Neonatal Nipple Latex-Free by Mead Johnson Nutritionals #4202-02.

Esbilac, Multi-Milk®, Benebac, Pet Nurser bottle: Pet Ag™, 255 Keyes Ave., Hampshire, Illinois, 60140, 1-800-323-6878

Milk Matrix: Pet Ag™, 255 Keyes Ave., Hampshire, Illinois, 60140, 1-800-323-6878

SnuggleSafe™ microwavable heating pad (www.snugglesafe.co.uk).

Similac™ Special Care™ Nipple by Ross Pediatrics- Ross Production Division Abbott Laboratories Item # 00095. Special on line order.

Syringes, feeding tubes/catheters, Catac nipples, etc.: Most of these products are available on-line at Chris's Squirrels and More: www.squirrelsandmore.com



Wombaroo™ formula nipples (Size F or LD)- www.wombaroo.com or www.perfectpets.com

Zoologic milk replacer: Pet Ag™, 255 Keyes Ave., Hampshire, Illinois, 60140, 1-800-323-6878

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IWRC- www.iwrc-online.org/placement

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Otterspotter, <http://otterspotter.com/>

IUCN/SSC Otter Specialist Group, <http://www.otterspecialistgroup.org/>

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OTTER REHABILITATION LITERATURE REFERENCES AND RECOMMENDED READING

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Fowler, M. E., 1986. Zoo and Wild Animal Medicine 2nd edition. W.B. Saunders Co.

Kruuk, H. 1995. Wild otters: Predation and Populations. London: Academic Press, Oxford.

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