



Tracking the Pack

It Takes a Pack to Raise Pups

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Raising wolf pups in an educational facility like the International Wolf Center takes a dedicated, trained wolf care team with a protocol in hand; pup nannies willing to spend time, energy and resources to travel to Ely, Minnesota, and care for the pups; and a warm, dry nursery for the pups. Fortunately, the International Wolf Center has all of these.

As discussed in previous “Tracking the Pack” articles,

the pups that will be socialized for the Center’s exhibit will be removed from their parents when they are between 10 and 14 days old, the critical bonding period. Research has shown that early socialization produces wolves that are more tolerant of human contact for display and veterinary care. During early socialization the pups require special care in a nursery, as they are born blind and are vulnerable to adverse temperatures. In a wild wolf den, the nursing female generally stays with the pups during



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these early critical weeks. Wolf care staff and nannies will attempt to simulate a denlike environment in the Center’s new wolf lab.

The pup nursery should be a quiet place with low light and soft bedding where the pups can cuddle, climb and become familiar with their new human caregivers. Pups may attempt to suckle but may be reluctant to bottle-feed from a rubber nipple that doesn’t feel, smell or taste like mom. Caregivers must be patient;



Lynn and Donna Rogers/www.bearstudy.org



Nancy Gibson (right) and Nan Vest bottle-feeding Malik and Shadow in spring 2000.

it is important not to force a pup to nurse from a bottle if it is not ready. Negative conditioning can affect a pup even at this age. Generally, a healthy pup can wait a few hours to get accustomed to the bottle.

A well-equipped wolf lab also needs a good supply of rubber nipples. Flow rates of different brands of nipples may vary, causing a pup to inhale the milk if the formula flows too fast, or to give up if the rate is too slow, missing necessary nutrition. Another reason to have spare nipples relates to the development of puppy teeth. During spring 2000, when the Center's arctic male Shadow was a 44-day-old pup, he bit off the top third of the nipple. On day 45, the nipple was found in the morning scat, and the

puppies were officially weaned.

Another component of the wolf lab is a well-equipped kitchen with a refrigerator, freezer, microwave, food scale and counter space to create fresh formula (sometimes as often as every two hours). Formulas vary based on the handler's personal preference, experience and availability of ingredients. Years ago, some facilities used a traditional dog replacement formula, but recent research suggests that the amount in the formula of a necessary amino acid called arginine, while sufficient for dogs, may be insufficient for wolves. Arginine deficiency may cause cataracts in young wolves, but the addition of Knox gelatin can avoid this ophthalmic

problem. The Center chooses to create a homemade formula using fresh goat milk, plain yogurt (with fat), one large egg yolk, baby rice cereal, baby strained beef, vitamin and mineral complex (especially B vitamin) and Knox gelatin.

As any new parent knows, when food goes in, it must come out. Pups may need to be burped during and after feedings, especially if they nurse too quickly. A pup less than 12 days old may not have developed enough muscle control to stimulate urination and defecation on its own. The mother licks the anal region to stimulate the pup and keeps the den clean of waste. A human caregiver needs to gently swab the anus and genital region with a soft tissue. As the pups age,

it is important to maintain a clean area for proper health. A well-equipped lab has disinfectant, lab gloves and plenty of paper towels along with daily garbage detail.

The best measure of a pup's health is its weight and condition. Any drop in body weight or failure to gain weight can be a sign of a problem. A reliable scale is standard equipment in a wolf lab. In addition, staff may record the body temperature of a pup; an increase in body temperature may be indicative of a virus or infection. Quick intervention may mean the difference between life and death for a young, vulnerable pup. Our nursery is equipped with a stainless-steel exam table that can be sterilized, a complete first-aid kit and sufficient lighting for veterinary exams.

The Center also has a strong interest in documenting the pups' development. Through use of Web cams, digital photographs and data sheets, this information can be shared with the public. Tune into the Web site to see updates of the pups' growth and a Web cam image of the nannies in action, or stop by the Center to see them in person. ■