



## Tracking the Pack

### Fitting Into the Pack: A Lesson in Social Dominance Hierarchy

by Lori Schmidt

There is a saying in the wolf world: “Invest in your pups; they’re the future of the pack.” The International Wolf Center has done just that by nurturing the newest pack members of our resident pack in Ely (*International Wolf*, winter 2000). As the photo in this article demonstrates, the Center’s efforts paid off — Malik and Shadow have developed into healthy, full-grown Arctic wolves. I’m sure the question on everyone’s mind is: How did it go?

The pups were introduced into the main pack on August 9th, weighing 34 pounds; by October 6th, they weighed 62 pounds,

and by late December, Malik and Shadow’s physical body structure matched that of MacKenzie, Lucas and Lakota, nearing 100 pounds. Even though they maintained the soft pelage and the slight uncoordinated efforts of pups, over winter, they became part of the pack’s “social dominance hierarchy.”

During fall and early winter, the adult wolves made allowances for the pups; the newcomers were allowed to eat at the carcass first; they could pull on MacKenzie’s tail without retribution; and they could jump on top of one of the adults with nothing more

than a responsive grunt. As winter waned and the pups began maturing, minimal allowances were made for these antics, and adult wolf rules began to apply. The deer carcass we feed them each Saturday night was no longer left to Malik and Shadow’s leisure: they now had to compete with the more experienced adults.

Feeding is not the only place where the pups noticed a change. When the pups were young, they were accustomed to greeting the wolf care staff as soon as the staff entered the enclosure. By definition of the social dominance hierarchy, the alphas have rights to do as they wish and they began to apply those rights as the pups began maturing.

One hierarchical right is the right to greet first. When wolf care staff enter the enclosure, MacKenzie, the

pack’s alpha female, forcefully pushes the pups aside and leaves them waiting for their turn. Mackenzie takes this right seriously; staff members have even observed her dragging Lakota off the greeting rock by his tail so he wouldn’t greet the handlers first!

The pups have not permanently established a place in the pack’s rank order and may not until they reach sexual maturity, between 18 and 24 months. Until then, the pups wait their turn as lower pack members, looking for opportunities to climb in the social rank order. One thing is certain — the changing dynamics will make for interesting observations for Center visitors. ■

Lori Schmidt is the wolf curator at our Center in Ely, MN.

#### TECHNICAL EDITOR’S

*NOTE: While the interactions described in this article are interesting from an academic standpoint, readers should not assume that they represent typical social interactions in natural wolf packs. The International Wolf Center wolf pack is unusual in three important respects: (1) the wolves are constrained by a fence and are artificially fed, (2) the adults are spayed, thus changing their natural hormonal profiles, and (3) the pack is composed of adult littermates and newly introduced, unrelated pups. Most natural wolf packs are composed of an adult breeding pair and their immature offspring; occasionally an unrelated adult joins the pack temporarily.*

—L. David Mech



Shadow (left) and Malik enjoy a quiet meal. As pups the adult wolves made allowances for them; they were allowed to eat at the carcass first.

Kyle Allen