

"Ranchers can't make good management decisions based on myth."

- Andrew Anderson, Montana land-owner and producer

Wolves operate in an annual cycle. Each season means a different stage in a wolf's biological cycle and encompasses different behaviors and travel patterns. Becoming knowledgeable about these behaviors and corresponding changes in behavior is helpful for ranchers to understand so that they may make good management decisions and successfully work around wolves on shared landscapes.

Winter: Wolves have thick, insulated winter coats and paws designed to travel easily on snow. When they travel, wolves will travel single file, creating paths of least resistance. Winter is often when wolves are most active and successful in hunting, taking advantage of ungulates' more vulnerable state due to less feed available and poorly designed hooves for running across the snow. This is the season wolves go into heat and breed.

Spring: Pack coherence is the strongest in spring when wolf pups are born around mid-April. Female wolves generally dig their den or prepare the previous den two weeks before giving birth. The rest of the pack is responsible for protecting the breeding female, hunting, and bringing her food. Pups generally start to emerge from the den around mid-May. The



mother and pups stay close to the den while the other pack members provide food and protection. The male may roam far to avoid attracting threats, including other wolves, to the den. Wolf packs are often quieter this time of year, howling less to avoid attracting predators or non-wolf pack members who could pose a threat to their pups. As wolves follow prey migration, they may transition to their summer range or follow a different summer travel pattern as they survey their territory.

Summer: The wolves' thick winter coats are replaced by short summer coats. Pups are moved to a "rendezvous" site away from the den in early summer. As the pups start to require more resources in terms of solid food, hunting activities increase to provide for the expanded family. Wolves are corpuscular, meaning that they are more active at dawn and dusk, often napping in the middle of the day. Hunting may occur during these times or any time during the day if the opportunity arises. While most of the pack is out hunting, at least one older or "nanny" wolf cares for and watches over the pups at the rendezvous site.

Fall: Pack coherence is lessened this time of year, and often, packs will split up over periods of time before coming back together. This is also the time of year that young wolves will disperse, hopefully allowing enough time to find a mate and new territory of their own. Wolves' coats start to become deep and dense. Wolf pups get their first experience with snow, which they explore with exuberance. Wolves will begin to transition to their winter range, following the prey migration, or transition to their winter travel pattern as they survey their territory.

