

Making Sense of Scent Marking

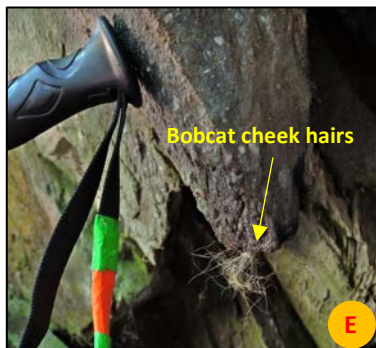
Story and Photographs by Susan C. Morse



What do deer, moose, cougars, bobcats, lynx and bears have in common? They communicate with others of their species through scent marking. In fact, nearly all terrestrial mammals from mice to elephants use semiochemicals so that they may olfactorily communicate with each other in absentia. Semiochemicals is from the Greek word *semeion* meaning “signal” or “sign”.

Carnivore and cervid species maintain social order through an elaborate repertoire of chemo-communications which are continually posted throughout the habitat and refreshed as needed. Urine, feces, saliva and exudates from various skin glands are deposited in specific scent marking environments which are often visually conspicuous and thereby attract olfactory inspection by neighbors and newcomers alike.

Scent marks, posted across a solitary wide-ranging carnivore’s expansive home range area, makes possible necessary communication in an energetically efficient manner. Through scent marking bobcats, cougars, or bears can exploit the resources of huge territories yet remain in near constant contact with others of their kind. Scent messages distributed throughout the shared environment mediate competition and aggressive encounters, while enabling breeding partners to locate one another at other times.



- (A) Making a scrape
- (B) Facial marking with scent from submandibular glands located beneath the chin.
- (C) Inspection of urine scent left by tom seeking a date
- (D) Remote camera picture of a tom bobcat at Wolfrun facial marking a conspicuous portion of the ledge that hangs down.
- (E) Closeup view of hairs that were left where he rubbed.