GLOSSARY OF TERMS AND ABBREVIATIONS

adaptive management: a model for wolf conservation and management in which the number of wolf packs determines the appropriate management strategies; changes in the number of packs determined through a monitoring program directs selection of more conservative or liberal management strategies; model incorporates resource objectives, monitoring protocols, evaluation of predicted outcomes, and a decision process

aggression: dominance behavior typical of canid species demonstrated towards humans

BLM: U.S. Bureau of Land Management

breeding pair: at least two adult wolves with at least two pups that survive to December 31; the number of breeding pairs are tabulated and used to measure progress towards the USFWS recovery goal for the gray wolf in the northern Rockies

CITES: Convention on International Trade in Endangered Species

compensation: monetary payment to offset or replace the economic loss for a death or injury to livestock or guarding animals due to wolf activity; may also entail financial assistance to livestock producers to offset costs associated with modification to husbandry practices to minimize the potential for wolf-livestock conflicts

confirmed depredation: incident where Wildlife Services conducts a field investigation of dead or injured livestock, at the request of the producer; depredation is *confirmed* in cases where there is reasonable physical evidence that an animal was actually attacked and/or killed by a wolf. The primary confirmation would ordinarily be the presence of bite marks and associated subcutaneous hemorrhaging and tissue damage, indicating that the attack occurred while the victim was alive, as opposed to simply feeding on an already dead animal. Spacing between canine tooth punctures, feeding pattern on the carcass, fresh tracks, scat, hairs rubbed off on fences or brush, and/or eye witness accounts of the attack may help identify the specific species or individual responsible for the depredation. Predation might also be confirmed in the absence of bite marks and associated hemorrhaging (i.e. if much of the carcass has already been consumed by the predator or scavengers) if there is other physical evidence to confirm predation on the live animal. This might include blood spilled or sprayed at a nearby attack site or other evidence of an attack or struggle. There may also be nearby remains of other victims for which there is still sufficient evidence to confirm predation, allowing reasonable inference of confirmed predation on the animal that has been largely consumed

Council: Montana Wolf Management Advisory Council

defense of life/property: release from criminal liability for killing or injuring a wolf if the wolf is attacking, killing, or threatening to kill a person, livestock, or a domestic dog (MCA 87-3-130)

delisting: removal of the gray wolf from the list of "threatened or endangered" species that are managed by the U.S. Fish and Wildlife Service under the Endangered Species Act; delisting requires evaluation of current status of species compared to the delisting criteria with regard to habitat, over utilization, disease/predation, existing regulatory mechanisms, and other factors affecting the continued existence of the species; if the current status is secure in each of the 5 categories and the recovery criteria are met, a species is delisted and managed by the state or tribal fish and wildlife management authority

depredation: incident where livestock or guarding animals are injured or killed

draft EIS: draft environmental impact statement identifying alternatives and environmental consequences

final EIS: final environmental impact statement; must include a summary of the major conclusions and supporting information from the draft environmental impact statement and the agency's responses to substantive comments received on the draft

EIS: environmental impact statement

ESA: Endangered Species Act

FWP: Montana Fish, Wildlife & Parks

GNP: Glacier National Park

GYA: Greater Yellowstone Area

habituation: readily visible in close proximity to people or structures on a regular basis; not threatened by close proximity and may even be attracted to human presence or human food sources; extremely rare behavior in wild wolves, but typical behavior for released captive wolf or wolf-dog hybrid; for wolves, may or may not involve food conditioning

illegal mortality: wolf mortality outside the provisions of a special kill permit, defense of life or property, agency management actions, a MFWP Commission approved season, or outside other regulations established for the gray wolf as a legally classified "species in need of management"

guarding animals: domestic animals (dogs, llamas etc.) that escort livestock to decrease likelihood of a depredation incident by aggressively defending livestock in the presence of wolves or other predators

legal mortality: lethal control or mortality of a wolf within the provisions of a special kill permit, defense of life or property, agency management actions, a MFWP Commission-approved season, or the regulations established for the gray wolf as a legally classified "species in need of management"

lethal control: management actions that result in the death of a wolf

livestock: cattle, calf, hog, pig, horse, mule, sheep, lamb, goat, guarding animals, emu, ostrich, poultry

management setting: the combination of landownership patterns, land use, social factors, biological constraints, and physical attributes of the environment that describe a particular area or management situation

management: the collection and application of biological information for the purposes of increasing the number of individuals within species and populations of wildlife, up to the optimum carrying capacity of their habitat, and maintaining such levels. The term includes the entire range of activities that constitute a modern scientific resource program including but not limited to research, census, law enforcement, habitat improvement, and education. Also included within the term, when and where appropriate, is the periodic or total protection of species or populations as well as regulated taking (MCA 87-5-102)

MCA: Montana Codes Annotated

MDOL: Montana Department of Livestock

mixed landownership: patterns of land ownership where privately owned lands are intermingled with public lands and/or corporate-owned lands; sometimes called a "checkerboard pattern"

MEPA: Montana Environmental Policy Act

MOU: Memorandum of Understanding

NPS: U.S. National Park Service

non-lethal control: a variety of management activities intended to avert or resolve a conflict situation without killing the wolf or wolves in question; examples include non lethal harassment to disrupt or interrupt wolf behaviors, frightening a wolf, monitoring of wolf location using radio telemetry, or relocation

non-lethal harassment: an example of non-lethal control where a wolf is frightened or threatened, but is not mortally wounded or killed; purpose is to discourage wolf activity near people or livestock; examples yelling, radio-activated noise-makers, or firearms which discharge cracker shells

pack: used generically to mean a group of wolves holding a territory and capable of reproduction; more specific definitions are social group and breeding pair

probable depredation: incident where Wildlife Services conducts a field investigation of dead or injured livestock, at the request of the producer; having some evidence to suggest possible predation, but lacking sufficient evidence to **clearly** confirm predation by a particular species, a kill may be classified as *probable* depending on a number of other factors such as (1) has there been any recently confirmed predation by the suspected depredating species in the same or nearby area? (2) How recently had the livestock owner or his employees observed the livestock? (3) Is there evidence (telemetry monitoring data, sightings, howling, fresh tracks etc.) to suggest that the suspected depredating species may have been in the area when the depredation occurred? All of these factors, and possibly others, should be considered in the investigator's best professional judgment.

problem wolf: wolf that has attacked livestock, or is a nuisance animal that could potentially compromise human safety

public safety problem or threat: any situation where the continued presence of a carnivore poses a threat to human safety; or, an attack has resulted in the loss of livestock or personal pets; or a human has been physically injured or killed

ROD: record of decision, sometimes called a decision document; a concise public notice that announces a state agency decision arrived at through the Montana Environmental Policy Act, explains the reasons for the decision, and explains any special conditions surrounding the decision or its implementation

regulated public harvest: category of legal of wolf mortality where wolves are killed under FWP Commission-approved seasons and regulations by licensed hunters or trappers; total harvest strictly controlled through permit or quota system; law enforcement as for other managed species

recovery goal: a total of 30 breeding pairs with equitable distribution throughout Montana, Idaho, and Wyoming for three successive years; breeding pair is defined as at least two adult wolves with at least two pups that survive to December 31; when the *recovery goal* is met, the U.S. Fish and Wildlife Service could initiate the process to remove the gray wolf from the list of threatened and endangered species protected by the Endangered Species Act

relisting: placing the a species back on the federal list of threatened or endangered species protected by the Endangered Species Act; relisting criteria may or may not be similar to delisting criteria; relisting requires evaluation of current status of species compared to criteria with regard to habitat, over utilization, disease/predation, existing regulatory mechanisms, and other factors affecting the continued existence of the species; if current status is not secure with regard to the 5 areas, a species may be relisted.

remove: to place in captivity or to kill under controlled conditions or in a controlled setting determined by management authorities

SB163: Senate Bill 163, Reclassify Certain Species for Management Purposes, passed during the 2001 session of the Montana Legislature and signed into law by Governor Martz

social group: a more specific definition of a wolf pack; in this document social group is defined as four or more wolves traveling in winter which is holding a territory and capable of reproduction

special kill permit: written authorization granted to a property owner by Montana Fish, Wildlife & Parks to kill or destroy a specified number of animals causing damage to private property; permits are only valid under a specific set of conditions or criteria

species in need of management: legal classification of nongame species that are designated by Montana Fish, Wildlife & Parks as needing special management regulations; Montana Fish, Wildlife & Parks, by regulation, establishes the limitations relating to taking, possession, transportation, exportation, processing, sale or offer for sale, or shipment considered necessary to manage nongame wildlife; Except as provided in regulations issued by the Department, it is unlawful for any person to take, possess, transport, export, sell, or offer for sale species designated by Montana Fish, Wildlife & Parks as "in need of management" (MCA 87-5-104 to 87-5-106)

take: to harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill wildlife

tri-state area: states of Montana, Idaho, and Wyoming, making up the northern Rockies wolf recovery area

unconfirmed: incident where Wildlife Services conducts a field investigation of dead or injured livestock, at the request of the producer; lacking sufficient evidence to classify an incident as depredation in contrast to other possible causes of death, it is classified as *unconfirmed*; it is unclear what the cause of death may have been. The investigator may or may not have much of a carcass remaining for inspection, or the carcass may have deteriorated so as to be of no use; in the context of wolf management, cause of death is attributed to a cause other than wolf predation

undocumented loss: livestock losses for which there is no apparent explanation for the loss; usually in the context of a numerical discrepancy between the number of livestock head at the beginning of the grazing season and what is retrieved at the end of the grazing season; evidence documenting a death is usually not found

USFS: U.S. Forest Service

USFWS: U.S. Fish and Wildlife Service

WMA: Montana Fish, Wildlife & Parks Wildlife Management Area

wolf-human conflict: where a public safety problem develops; a situation where an MFWP employee reasonably determines that the continued presence poses a threat to human safety, an attack has resulted in the loss of livestock or personal pets, or that a human has been physically injured or killed.

wolf-livestock conflict: where a wolf or wolves are loitering, testing, worrying, or otherwise disrupting livestock; also, a situation where a wolf is suspected to have killed or injured livestock or guarding animals

worrying: to disrupt, cause anxiety, make uneasy, or harass repeatedly or over a period of time; also, to seize, especially by the throat, with the teeth and shake or mangle

WS: U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services; federal work unit with responsibility to address and resolve damage caused by wildlife; examples include bird concentrations at airports or depredation on livestock

YNP: Yellowstone National Park