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Oregon Wildlife Damage Prevention and Compensation Program

Wildlife White Paper No. 2

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1. Introduction

Depredation of private property by wildlife (i.e., economic loss caused by damage to crops, forage, livestock, infrastructure or facilities) is a contentious issue between property owners and the Oregon Department of Fish and Wildlife (ODFW). Property owners have complained that damage by wildlife, especially by large ungulate grazers in the past, and now livestock by large carnivore predators, is causing them significant monetary loss.

Since the 1970s, there has been considerable funds spent, studies made and effort expended by state wildlife departments, federal resource management agencies and property owners to resolve the issue of wildlife depredation. Despite these efforts, many property owners subject to ongoing wildlife depredation consider current damage to crops, forage and livestock to be escalating, and ODFW's response to wildlife damage inadequate.

While wildlife depredation can affect all property owners, it is ranchers and farmers that are becoming increasingly susceptible to damage caused by wildlife. Wildlife responsible for most current damage to private property includes:

1. large carnivores (Coyote, Black Bear, Mountain Lion, **Wolves**),
2. large ungulate wildlife (Deer, **Elk**, Pronghorn) and
3. resident (**Turkey**) and migratory (**Geese**) game birds.

Wildlife caused damage to private property is a statewide issue. While the damage to private property is not directly the fault of the wildlife or the state, the state has legal and management responsibility for most wildlife. Consequently, damage to private property by wildlife should be addressed by the state. .

Owners of private property, especially farmers and ranchers, want to find equitable solutions to the problem of wildlife damage to private property. Currently, wild ungulates (elk and deer) are the primary huntable wild ungulates in Oregon, and the primary prey species for large carnivore predators. Ranchers with livestock also recognize that a significant decline in wild ungulate numbers will increase large carnivore predation of livestock as livestock become the primary prey species for all predators.

There is a developing consensus among owners of private property that poor condition of public land habitat is a major factor influencing wildlife, especially large ungulate wildlife, to seek out habitat on private property. Changes to public land rangeland and forested habitat on public land that contribute to wildlife use and potential damage of private property include: i) poor structural characteristics of forested habitat on public lands provides less security and shelter for wild and domestic ungulates, ii) lack of managed timber harvest to create openings in the

forest canopy to promote growth of herbaceous forage, iii) inadequate “backgrounding” of forage by domestic ungulates to improve nutritional content of forage for large wild ungulates and reduce herbaceous fuel loads, and iv) increasing dominance of both public and private rangeland and forest habitat by invasive and weedy vegetation.

2. Causes of Wildlife Damage.

A successful Wildlife Damage Prevention and Compensation Program requires knowledge and understanding of the reasons that damage is occurring, the places it will probably occur, and the time at which it will occur. Fundamental to this understanding is the recognition that Oregon’s landscape is comprised primarily of watersheds. This landscape pattern repeats itself throughout the state, ranging from large river drainages to small stream tributaries. Within the general pattern of watersheds, topography has a similar land form consisting of valleys, adjacent lower elevation hill-land terrain, and higher elevation mountainous terrain. As a result of this typical topographic pattern, valleys and lower elevations are the location of most privately owned land and the site of associated developments. In contrast to lowlands, uplands are less developed, and tend to be public lands managed by public agencies.

Landscape Characteristics.

The physical attributes (i.e., land-form, topography, elevational gradients, water sources, vegetation, etc.) of a watershed, or any part of the watershed, are a major determinant of land use, and the purpose for which the land is used. Intensive crop agriculture (i.e., specialty crops, hay and grain, irrigated pasture, etc.) is generally associated with lower elevation valleys of watersheds due to the availability of fertile soils and water for irrigation. Lower elevations are also the location of most transportation corridors, farms and ranches, industrial sites, and cities and towns. Lower elevation hill-lands connected to valleys were previously used primarily for livestock grazing and/or dryland crop production. While still used primarily for livestock grazing, most of the former dryland crop ground is no longer farmed unless underground aquifers provide water for irrigation. Naturally wet or irrigated pastures associated with cropland are important sources of feed for wild and domestic animals.

Prior to settlement and extensive development, valleys and lower to middle elevation cropland and pastures were important spring/fall or winter habitat for wild ungulates, migratory waterfowl and resident game birds. Middle and higher elevations of watersheds are typically grassland and forest habitat used to graze livestock, harvest timber for wood products, hunting and recreation. Higher elevation grassland, forest and alpine was, and still is, important summer habitat for wild ungulates, game birds and other wildlife.

Over 51 % of the land area of Oregon is public land managed by the federal government agencies. Public land use was oriented towards grazing by domestic ungulates, timber harvest, mining, hunting, and recreational activities. Although large tracts of privately owned forest and rangeland exist in Oregon, the majority of higher elevation rangeland and forest grazed by wild and domestic ungulates is public land managed by the Bureau of Land Management or the Forest Service. Currently, recreational use is becoming the most important use. On both private and public rangeland, livestock are generally extensively managed, and have grazing behavior similar to wild ungulates.

Landscape-Scale Issues

Most property owners engaged in crop agriculture and/or livestock production relate to the landscape from the perspective of risk associated with land use. Categories of risk affecting land use and ranch operation include: i) natural (i.e., impact of weather, climate, flooding and access to resources), ii) financial (i.e., costs of operation affected by inflation, interest rates, supply chains, product marketing); and iii) socio-economic (urban development, legislation, regulation, etc.). Wildlife damage to them is just another risk to their agricultural business that can incrementally affect both short and long-term sustainability of the operation.

Wildlife in general appear to relate to the landscape as habitat without distinction between ownership or land use. From this perspective, wildlife use of a landscape is driven by their need for security, shelter and food. These three factors, while variable in relative importance depending upon immediate circumstances, continuously influence wildlife interactions with habitat. The most optimal habitat will be the mix of land form and vegetation in the landscape that best meets their immediate needs.

There are several landscape-scale issues that cause wildlife to damage private property. These issues include: i) degraded public rangeland and forest habitat, ii) degraded forage quality caused by wildfire, invasive and/or noxious vegetation, iii) barriers that cause lack of habitat connectivity that interrupt or change wildlife movement patterns, and iv) pressure created by large carnivore predators (cougar, bear, wolves) that may be forcing ungulate wildlife to seek security, shelter, and food at critical times on private property.

Forage Quality. In Oregon and other western states, millions of acres of former dryland cereal grain fields have been converted to perennial vegetation to reduce erosion and provide food habitat for wild herbivores and upland game birds (i.e., Conservation Reserve Program). Almost all cropland and most of the lower elevation pastureland was privatized during early settlement. Currently, much of the dryland crop fields are now enrolled and administered in USDA-Farm Services Administration (FSA) conservation programs that tend to restrict or not allow grazing by domestic livestock. Lack of proper grazing by livestock can negatively affect the quality of forage available to wildlife in different seasons.

Barriers to Wildlife Movement. Movement within, and migration through a watershed, is a common attribute of terrestrial wildlife. In Oregon, terrestrial wildlife (especially ungulate wildlife), tend to move along watershed elevational gradients to higher or lower habitat depending on the season. Movements of wildlife through the watershed often force encounters with private property used for crop production, livestock grazing, urban development and transportation corridors.

Habitat Connectivity. Maintaining the functionality of migration routes and the availability of habitat associated with these routes is difficult. Barriers (roadways, fences, human development, etc.) constrain wildlife movement and expose animals to unnecessary risk. Maintaining or restoring habitat connectivity is important to ensuring that migrating wildlife have safe passage through impediments that affect their security, shelter and food needs.

Large Carnivores. A consensus is developing among farmers and ranchers that large carnivore predators influence other wildlife to increasingly use private property. Although unproven, the growing number of resident deer and elk may be caused by large carnivores influencing ungulate wildlife to move to private property, or prevent them from leaving (Link to preliminary pilot sites:” <https://arcg.is/1Submbo> “

3. Oregon Wildlife Damage Program

An Oregon Wildlife Damage Program that addresses both prevention and compensation has the highest potential to resolve the wildlife damage issue. Addressing and resolving these issues will require the formation of coalitions comprising private landowners, state and federal agencies, and other organizations that have a vested interest in resolving the wildlife damage issue.

Both Washington and Wyoming have wildlife damage programs that focus solely on monetary compensation. Washington's compensation program addresses damage only to commercial crops, while Wyoming's program addresses losses to growing or stored crops, damaged land, seed crops, improvements, and forage and livestock, including bees. Wildlife recognized as causing damage that is eligible for compensation include large carnivores, large ungulate wildlife and resident and migratory game birds.

The focus of wildlife damage programs in Colorado, Idaho and Nevada is both prevention and monetary compensation for the damage caused by wildlife. Wildlife recognized as causing damage in these three states are large carnivore predators and large wild ungulates. Resident and migratory game birds are not mentioned.

Oregon's Wolf-Livestock Compensation and Benefit Program is an example of direct monetary compensation for damage caused by wolves (i.e., killing or injuring livestock). The program's short-term prevention component is limited to non-lethal activities such as fladry, Fox Lights, and range-riders, which may only work for a limited time before becoming ineffective in preventing livestock mortalities or injuries. Lethal removal of wolves as a preventive tactic in the program is oriented towards "after the fact" removal of individuals in the pack that are believed to be causing the damage. Although removal will prevent the "specific carnivore" from causing future damage to livestock, it does not prevent other carnivores from causing similar damage to livestock in the immediate or future time frame.

Compensation and Prevention.

Monetary compensation is payment, or reimbursement for damage caused by wildlife to owners of private property. The long-term effectiveness of direct monetary compensation requires that funding be available in an amount sufficient to address the problem as it occurs over time, and at the scale that damage is occurring. Direct monetary compensation alone can mitigate the short-term economic impacts of wildlife damage to private property; it does not resolve the problem, or prevent it from occurring in the future.

Prevention of wildlife damage to private property usually requires addressing landscape-scale issues on both public and private land. The primary landscape-scale issues that need to be addressed are: i) degradation of forest and rangeland habitat, ii) degradation of forage quality, iii) depredation of wild and domestic ungulates by large carnivore predators, and iv) barriers to wild ungulate movements. Addressing these issues at the landscape scale will necessarily require the involvement of federal and state resource management agencies.

Prevention should prevent or significantly reduce the amount of wildlife damage occurring on private property. To do this, prevention should be applied at two different time frames: short term during or immediately following a damage event, and long-term to prevent the event from reoccurring at a future time.

Short-Term Prevention. Short-term prevention addresses wildlife damage that is on-going (e.g., damage hunts, hazing wildlife from private land, road closures, providing elk panels to protect hay stacks, etc.) Usually, implementation of these preventive measures is by owners of the private property being damaged, or by state wildlife departments (e.g., damage hunts, hazing wildlife away from cropland or pasture, providing panels and/or netting to protect hay stacks from depredating wildlife, etc.).

Long-Term Prevention. Long-Term prevention generally requires longer time-frames and expenditures to complete. This type of prevention includes: i) construction of wildlife-proof fences to protect cropland, ii) development of Wildlife Feeding Stations and Wildlife Management Areas, iii) re-activating closed and vacant federal grazing allotments to improve forage quality and reduce fine fuel loads, iv) wildfire woody fuels reduction and habitat improvement projects, v) noxious weed control programs, etc. Often, wildlife damage prevention is not the initial purpose of the agency implementing the project, but accomplishes the preventive measure as a subsidiary outcome of the actions taken.

4. Establishing a Wildlife Damage Program

Successfully implementing a wildlife damage prevention and compensation program needs to address the multiple interacting factors that include: i) wildlife species creating the damage that will be compensated, ii) what types of damage will be compensated, iii) eligibility of the property owner to qualify for compensation, iv) procedures to implement prevention measures and claim compensation, v) access to long-term compensation funding sources, vi) procedures to determine the amount and value of the wildlife damage, vii) procedures to disburse compensation to the affected private landowner, and viii) formation of coalitions between the diverse stakeholders involved.

Establishing a county wildlife damage program requires the involvement and commitment of various organizations that have a vested interest in finding equitable solutions to the wildlife damage issue. Key stakeholder organizations include: i) the owner(s) or lease holders of private property on which damage is occurring, ii) county, state and federal institutions involved in resource management at the local level, and iii) other organizations that will benefit from or can contribute to resolving the damage issue.

Key State Institutions

State institutions that should be involved in the Wildlife Damage Program include:

Interim House Committee. The Interim House Committee on Agriculture, Land Use, Natural Resources, and Water (HALNW).

Legislators. Senators and Representatives from the district/county in which the Wildlife Damage Program is implemented.

State Wildlife Damage Program Advisory Committee. The Committee will advise and address legislative and implementation issues that affect the Oregon Wildlife Damage Program. The committee should function as an “intermediary” link between the property owner being affected by wildlife damage, agencies involved in implementation of county wildlife damage programs, and state, federal and NGO organizations that advocate for, or enable, implementation of wildlife damage programs. Membership of the Committee should include representatives from

organizations that formed the “Elk and Deer Compensation Workgroup” and others as needed (Attachment).

Oregon Department of Fish and Wildlife (ODFW). The primary function of the ODFW is addressing wildlife damage issues at the county and regional levels. Responsibilities of ODFW also include: i) implementing short-term damage prevention measures, ii) assisting in verification of wildlife damage, and iii) interacting with federal agencies at the county and regional levels to assist long-term prevention activities. ODFW will have membership in the County Wildlife Damage Committee and the State Wildlife Damage Advisory Committee.

Oregon Department of Agriculture (ODA). The primary function of the Oregon Department of Agriculture is the administration and management of prevention and compensation funds allocated by the legislature or from other state and non-state sources. A secondary function of the ODA is distribution of state compensation funds to the county for verified wildlife damage claims. The ODA will be advised of the USDA-APHIS (Wildlife Services) activities that involve the County Wildlife Damage Program.

Oregon Department of Forestry (ODF). The Primary function of ODF will be suppression of wildfire on private property and assisting private landowners to improve wildlife habitat through fuel reduction, timber harvest programs and fire prevention.

Oregon Department of Transportation (ODOT). The primary function of ODOT relative to preventing wildlife damage, is removal of barriers that impede wildlife movement and migration. A major barrier to wildlife movement and migration is transportation corridors (highways, railroads, right-of-way fences, etc.). Many, if not most, transportation corridors are located in valleys that before settlement were spring/fall or winter range for large wild ungulates. Transportation corridors in valleys are closely linked to development activities that also may impede wildlife movements.

Key Federal Institutions

USDA-Forest Service (FS)/USDI-Bureau of Land Management (BLM). The FS and BLM are responsible for implementing landscape-scale wildlife damage preventative measures on federally managed grassland and forest. Both agencies are currently implementing programs that improve habitat and habitat connectivity for wildlife as a secondary benefit, especially for wild ungulate grazers (elk, deer, pronghorn) and livestock. Ongoing habitat programs include:

- Fine and woody fuels reduction projects (thinning and burning programs, fire breaks, domestic livestock grazing) to prevent catastrophic wildfire.
- Opening closed and vacant grazing allotments to allow livestock grazing to reduce fine fuel loads and improve forage quality for livestock and Wildlife.
- Seasonal road closures to prevent vehicle traffic from impeding wildlife movement.

The primary responsibility of the FS and BLM at county and regional levels relative to preventing wildlife damage is habitat improvement. The FS and BLM are currently engaged in woody fuels reduction programs designed to minimize the potential of catastrophic wildfire on forest and rangeland under their jurisdiction. The program involves treatment of woody ground debris and standing woody-ladder fuels that stimulate out-of-control wildfire. Treatments to reduce fuel loads include: i) reducing woody understory cover with controlled burning, ii) thinning dense stands of lodgepole by cutting, piling and burning, iii) creating firebreaks along primary forest roads by logging trees <21 dbh, and iv) cutting, piling and burning or chipping

dense stands of lodgepole. Controlled grazing by livestock on closed or vacant grazing allotments can reduce the volume of herbaceous fine fuels, and will impede the spread and intensity of wildfire on open grass-steppe and forest-steppe rangelands.

USDA-Natural Resources Conservation Service (NRCS). The NRCS provides technical and financial assistance to help landowners improve wildlife habitat on private property. Programs include: i) Conservation Stewardship Program (CSP), ii) Grassland Conservation Reserve Programs (G-CRP), Conservation Reserve Easement Program (CREP), iv) Conservation Reserve Program (CRP), Environmental Quality Incentive Program (EQIP). The NRCS also develops a Conservation Management Plan for the property owner. The cooperating property owner is reimbursed for costs incurred during program implementation.

USDA-APHIS-Wildlife Services (WS). The primary function of Wildlife Services is to resolve wildlife conflicts to allow people and wildlife to co-exist. WS provides technical assistance and direct management operations in response to requests for assistance by property owners. Both lethal and non-lethal techniques are used in resolving conflicts with wildlife, especially with semi-protected large carnivore predators.

Key County Institutions

Soil and Water Conservation District (SWCD). The county Soil and Water Conservation District (SWCD) is an appropriate location for the County Wildlife Damage Program. Reasons include: i) there are 45 County Soil and Water Conservation Districts in the State, ii) Soil and Water Conservation Districts are a program in the Oregon Department of Agriculture, and iii) the Wolf-Livestock Compensation and Benefit Program is administered by the County Soil and Water Conservation District in some counties. Locating the County Wildlife Damage Program in the SWCD as a companion program to the W-LCB can be easily achieved. In counties without a W-LCBP, the procedures required to establish the CWDP at the county SWCD would be similar.

- **Administrative Staffing.** The SWCD in many rural counties have limited staff. In those counties, procuring a part time administrative assistant to manage the CWD program may be necessary. Duties of the administrative assistant will include: i) coordination of a county wildlife damage implementation with other counties and the state, ii) processing and consolidating damage claims, and iii) administrative support.
- **Damage Adjudicator.** A Crop and Structure Damage Adjudicator Program may need to hire a private contractor with knowledge of different crops in the county/region and crop adjudication expertise.
- **Pasture/Forage/Rangeland Damage (PFR) Adjudicator.** Same as a crop adjudicator but with expertise in evaluating damage by wildlife to pasture, forage, hay crops and rangeland.

County Commissioners. Most county governments are led by elected “commissioners” who together preside over various departments and control county finances. Important departments include the Sheriff, Land-use Planning, Roads, Court, etc.

Wildlife Damage Committees

The County Wildlife Damage Committee will be responsible for organizing stakeholders and overseeing the wildlife damage in the county. Members of the committee will include representatives from federal and state resource management agencies located in the county, and county government. Responsibilities of the committee will include support advice and supervision and application of preventive measures.

The Program Implementation (or Working) Group includes representatives from the County, ODFW, NRCS, Forest Service, BLM, Conservation NGOs and other county-level organizations that are, or should be, stakeholders in resolving wildlife damage issues. The purpose of the implementation committee is determining the what, where, when, and how to compensate landowners and prevent wildlife damage to private property.

5. Establishing Wildlife Damage Prevention and Compensation Pilot Areas

Selection of a limited number of wildlife damage pilots in different regions of the state will allow: i) testing and evaluation of the county wildlife damage concept and structure, ii) formation of local level coalitions needed to implement prevention measures and iii) evaluation of regional differences and needs in the state. Trial counties would be selected from the major eco-regions/watersheds of the state (<https://arcg.is/1Submbo>).

Effectiveness of the wildlife damage pilots will be evaluated by the State Wildlife Damage Advisory Committee and the County Wildlife Damage Committee. Both Committees can recommend necessary changes or improvements to the County Wildlife Damage Program. If the form and function of the county approach is evaluated as effective in both western and eastern Oregon, the program will be implemented as a state wide program in counties experiencing substantial wildlife damage.

The pilot program will allow integration of state agency programs (e.g., ODFW Migration Corridors and Habitat Connectivity, etc.), federal agency programs (e.g., Forest Service Fine and Woody Fuels Reduction Program , NRCS Conservation Stewardship Program/Grassland Conservation Reserve Program, etc.) and the development of new venues of compensation funding to address wildlife damage (e.g., Risk Management Agency Insurance Programs, Private Insurance Programs, etc.).

Wildlife Damage Areas.

Establishing County Wildlife Damage Areas (WDA) enables private property owners, state and federal resource and wildlife management agencies to develop and apply effective prevention and compensation measures to alleviate wildlife damage. The number of WDA established in each county will be dependent upon: i) size and diversity of the county, ii) extent of wildlife damage, and iii) diversity of habitat and agriculture crops in the county. The number of counties in a WDA depends on movement patterns of the wildlife involved in damage

Selection of WDA. The WDA will comprise one or more Wildlife Management Units (WMU) which are the geographical and administrative units employed by ODFW to manage wildlife. Wildlife Management Units also often coincide with Conservation Opportunity Areas (COA). The WDA pilots would address “hotspot areas” of chronic and/or escalating wildlife damage.

The criteria for selection of Wildlife Damage Pilot Areas includes.

- high and expanding numbers of large predators,

- forests that have been extensively logged in the past which are now showing extensive growth of woody shrubs and small trees,
- public land forest and grassland habitats that are no longer grazed by livestock and are becoming increasingly susceptible to wildfire,
- public and private land holdings represented across the landscape,
- cropland used primarily to produce specialty crops, irrigated pasture, cereal grains, and hay (including alfalfa), and
- a large and growing wildlife damage problem.

Assessing Wildlife Damage. Successfully implementing a compensation and prevention program to mitigate wildlife damage must address multiple interacting factors including: i) wildlife species creating the damage that will be compensated, ii) what types of damage will be compensated, iii) eligibility of the landowner/land user to qualify for compensation, iv) procedures for claiming compensation, v) accessing long-term funding sources, vi) procedures to determine the amount and value of the damage and vii) procedures to disburse compensation to the affected private landowner viii) procedures to disburse funds to implement habitat improvement projects.

Compensation for damage caused by wildlife can be assessed on a “damage done” or a “damage from take” basis. Relative to elk and other wild ungulates, both methods, depending on specific damage circumstances, can be used.

Damage Done. The damage done basis of assessing wildlife caused damage is most applicable to crops and cropland, facilities, and fixtures. For cropland, the primary damage occurs from the reduction in productivity caused by animal consumption of the crop, trampling of the crop, and soil impaction. Damage to fixed assets such as fences, irrigation equipment, etc. can be assessed at each event, with compensation determined by cost of repair and time involved. If the wildlife damage is reoccurring, such as daily or weekly visits by elk to a hayfield, the initial three procedural steps should be followed for each event. At the end of the season (for crops), an assessment of crop productivity would be made by the assessment team to determine the amount of loss, and the value of the loss.

Damage Take. Determining compensation on a damage take basis is especially useful for evaluating wild ungulate forage consumption at landscape scales (i.e., pasture and rangeland). At that scale, damage compensation would be based on the amount of forage consumed by ungulate wildlife for the duration of the time the animals were on the private land, with compensation based on the value of the forage consumed. The procedure to determine forage take and compensation value is similar to the process used to determine the value of forage consumed by domestic livestock.

The County Wildlife Damage Program can obtain this information through direct observation or remote observation (i.e., fixed-wing aircraft, drones, trail cameras, and phone cameras) to monitor wildlife use of privately owned land (i.e., facilities, cropland, rangeland, etc.). Information acquired by the different techniques can be integrated to determine the type and extent of depredation, and a compensation value.

Landscape Scale Monitoring. Fixed-wing or rotor wing aircraft can be used to monitor seasonal wildlife use on private and public property. Periodic flights along permanent transects can be

used to obtain an estimate of seasonal wildlife use, whether wild or domestic ungulate or large carnivores. During each flight occurring at time intervals, the location and number of targeted wildlife along the transect can be recorded and evaluated. Transects could be flown at defined intervals (subject to weather conditions) during winter, spring/fall and summer seasons.

Property Owner Observations. Observations by cooperating property owners could be obtained by: i) using phone cameras to record short videos of elk damage done to structures, facilities, and crops, ii) trail cameras placed along elk travel routes from rangeland to cropland can be used to obtain wildlife numbers and time and duration of the damage event, and iii) periodic aircraft and/or drones flights on private land to establish wildlife numbers and location relative to facilities, structures and crops.

Cropland Scale Monitoring. The procedure to assess the amount of damage and calculate compensation value is: i) obtain photos and/or videos to assess site damage and animals causing damage, ii) record location, date, habitat type, kind and number of ungulates; iii) submit evidence to the damage assessment team (i.e., insurance agency, wildlife damage agent, etc., and iv) request site visit by the crop adjudicator to determine value of the damage for compensation.

If the wildlife damage is reoccurring on a daily or weekly basis, the initial three procedural steps should be followed for each event. At the end of each season, an assessment of total damage could be made by the assessment team to determine the total amount and value of the loss. The information collected by the different methods will be consolidated in damage files established for each cooperating land-owner by the project Soil and Water Conservation District.

6. Compensation Funding Models

Different compensation models include:

- **Legislative Model.** The current “Wolf-Livestock Compensation and Benefit Program” is an example of a legislated compensation model.
- **PFR Model.** The Pasture-Forage-Range Program developed by the Federal Risk Management Agency is an example of a federal-private insurance program administered by private insurance providers and subsidized by the federal government.
- **Insurance Model.** The Wildlife Damage- Group Risk Insurance Program (GRIP)), if implemented, is a State-Private Insurance Provider-Property Owner model. In this model, the state contracts with a private insurance company to provide wildlife damage insurance to property owners.