

2. Disease and Parasites

ISSUE 2.1	WNV is lethal to GrSG, has been detected in Colorado, has caused GrSG mortality in Colorado, and thus presents a risk to GrSG.				
OBJECTIVE 2.1.1	Minimize the occurrence and impact of WNV if it threatens GrSG populations.				
Reference Number	Conservation Strategy	Responsible Parties	Timeline	Implementation	Effectiveness
2.1.1.1	Monitor GrSG and other species (through ongoing projects) for presence of WNV in GrSG counties; coordinate this effort with other research and management activities.	CPW	Ongoing	CPW: CPW's Wildlife Health Lab has received <5 carcasses/yr for exam in recent years. NESR - CPW collected and processed 17 GrSG mortalities in 2007 to test for WNV. Only 1 tested positive for WNV. CPW also worked with Routt County (2004-2006) to set up mosquito traps in GrSG habitat to test for WNV.	Colorado has not had a problem with WNV.
2.1.1.2	To protect GrSG in localized areas where WNV has been detected, control mosquitoes through applications of appropriate EPA-regulated larvicides and/or adulticides.	Multiple Parties	As needed		
2.1.1.3	Continue to support investigation of GrSG susceptibility to, and inheritance of, immunity to WNV.	Multiple Parties	Ongoing		
2.1.1.4	Determine the impact of wet conditions on mosquito production as it relates to the potential for catastrophic disease in GrSG. Determine the risk factors and potential of catastrophic disease in GrSG populations.	Multiple Parties	Begin by 2010 ongoing		
2.1.1.5	Encourage the design of water development structures to minimize WNV risk to GrSG	Multiple Parties	Now		
ISSUE 2.2	Diseases and/or parasites other than WNV have been shown to be lethal to, or to compromise the health of GrSG.				
OBJECTIVE 2.2.1	Minimize the occurrence and impact of diseases and/or parasites (other than WNV) if they threaten GrSG populations.				
Reference Number	Conservation Strategy	Responsible Parties	Timeline	Implementation	Effectiveness
2.2.1.1	If GrSG populations are infected with disease or parasites that threaten a population, (1) investigate, isolate, and control the source of disease or parasite; and (2) if possible, treat GrSG.	CPW	As needed	CPW: Statewide wildlife health monitoring program is in place for species including sage grouse; no reports of large-scale mortality events in recent years & <5 carcasses/yr submitted, but no systematic surveillance or monitoring is in place.	
2.2.1.2	Investigate the possible need to conduct standard disease screening on all game birds before they are imported into Colorado or moved within GrSG range in Colorado.	CPW	As needed	CPW: Existing regulations (0-007) require health certificate & limited disease screening prior to import but no requirements for within-state movement.	
2.2.1.3	Remain vigilant regarding the latest information and research regarding avian influenza and upland game birds.	CPW	On going	CPW: Statewide monitoring program is in place for species including sage grouse; problems targeted for monitoring are developed & modified based on published & online professional communications (e.g., on recurring or emerging diseases).	
2.2.1.4	Investigate the need to regulate intra- and inter-state movement of game birds by all parties.	CPW	2008	CPW: Current rules prohibit possession of nonnative grouse species (0-008-B-8) but allow release of various other "game birds" on private & some public lands with no permit, health, or monitoring requirements (0-009-B). Some local control of these activities has been recommended or attempted, but not yet adopted.	