The Role of Veterinary Medicine in Recovery Planning

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The fragmentation and reduction of animal populations may result in an increased susceptibility to many potential health threats within the population. The factors that contribute to this increased susceptibility can include nutritional, physiological, and behavioural stress, local human and domestic animal activities, exposure to toxins or exotic disease agents and the loss of genetic variability resulting in a decreased immunity to disease. Because these factors can have critical effects on small isolated animal populations, sound epidemiology and medical practices will continue to make important contributions to the science of population recovery. The role of veterinary medicine in wildlife management has been an evolving one over the past few decades. As more veterinarians pursue advanced training in wild animal medicine they can provide an even greater resource for recovery teams and other groups working to conserve and propagate populations of endangered species. Wildlife and zoo veterinarians can provide individual animal diagnosis and treatment, pathological assessment of mortalities, insight into the different physiologies of animal groups, disease screening of populations, development of protocols (e.g. quarantine, immobilization and handling, housing, nutrition), advice and technology to assist reproduction, training for field staff and assistance with developing information databases on the genetics and health of populations. Several examples from Canadian and international programs will be given including the International Whooping Crane Recovery Team and Health Advisory Team, the Canadian Swift Fox Recovery Team and the Canadian Vancouver Island Marmot Recovery Team.