A Novel, Automated Remote Sensing Tool for Detecting Wolves

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The USDA Fish and Wildlife Service recently proposed removing Endangered Specie Act protections for wolves in the Northern Rockies. As the wolf (*Canis lupus*) 1 delisted, federal funding to monitor and protect the wolf population will disappear. The task of monitoring wolves must be taken up by the states with limited resources therefore new monitoring methods that are robust yet cost-effective are necessary. We have developed an automated remote sensing tool, "howlbox," that can broadcast a wolf howl, record responses, then hibernate for a specified time period until the next scheduled howl broadcast. The howlbox is non-invasive and is ideal for use in Wilderness Areas where access is difficult and sampling is labor intensive and expensive. We recently tested the howlbox on wild wolves in the Bitterroot Valley and obtained 12 responses over 2.5 days of remote sampling. We plan to test the howlbox widely on radio-collared packs in the summer of 2008 to further refine this novel tool. The howlbox can also be used in roaded areas to decrease the costs and concerns associated with trapping and radio-collaring wolves for monitoring purposes.