

## **Frequently Asked Questions about Raven Takes at the Rawlins Landfill**

### **How are ravens a health risk to humans?**

Large concentrations of ravens pose a risk to human health and safety as they can transmit various zoonotic diseases via fecal contamination. While the list of transmissible diseases is quite long, Avian Influenza is one of the primary concerns at this time. It is rather common to find fecal matter several inches deep where large congregations roost.

### **How are ravens a risk to wildlife and livestock?**

Over the last several decades, anthropogenic subsidies have resulted in raven populations that far exceed the natural carrying capacity of the landscape. Studies reflect that these populations have grown severalfold during this time (anywhere from 300% to more than 1,000 % depending on the region). This unnatural abundance of ravens poses a significant threat to wildlife, with Sage Grouse being of utmost concern.

Ravens are incredibly efficient nest predators and have been documented to be the most significant predator depredate Sage Grouse nests. Furthermore, in the spring when neonate ungulates and livestock are born, ravens frequently depredate via pecking of the eyes, navels, or rectums of these newborn animals.

### **What method is used to cull the birds? How does this avicide target ravens in particular?**

DRC-1339 is a bird specific avicide, which due to differences of metabolic processes, is highly effective in the control of most commonly targeted avian species (i.e. ravens, crows, starlings, etc.) yet poses little risk to predatory avian species, such as raptors. Further selectivity is achieved by choosing a bait source that is specific to the targeted species, to which the avicide is applied.

Additionally, Wildlife Services personnel take several prudent measures to mitigate the take of any non-target species. Prior to treatment with DRC-1339, site surveys and pre-baiting occur to observe which species are present at the site, and to make certain that only the targeted species is consuming the bait. Once our personnel are confident that only the targeted species are consuming the bait, we will proceed with treatment.

### **Since this avicide will kill the raven population at the landfill, what will this mean for any predators or animals that might consume the dead ravens? Will they be harmed as a result of the avicide?**

DRC-1339 is bird-specific, and applied to a bait source that is specific to the targeted bird species. Once consumed, the affected birds will commonly perish at the roost site 12-72 hours, post consumption. Secondary risks from scavengers are also not a concern as the chemical is metabolized within 2 hours of consumption; hence, there is effectively no residual chemical remaining in the carcasses of treated birds.

### **Are there more "humane" ways to remove the birds from the landfill?**

This is a tough one to answer, as "humane" is a rather subjective term. While birds treated with DRC-1339 do become lethargic for a brief period of time before perishing, studies have not documented any behaviors that indicate treated birds suffer in any way.

There are other methods that can be utilized on smaller congregations of ravens (i.e. various nets, traps, firearms, etc.); however, take is limited to only a few individuals at a time and are quickly rendered ineffective with larger congregations as the remaining ravens quickly learn to avoid these methods.

### **What prompts a raven take? Are raven takes permitted by a federal agency?**

For USDA Wildlife Services to initiate raven control, there first must be a request for assistance. This can be from another agency, entity, or individual. Secondly, there has to be some form of damage, or threat of damage (i.e. human health and safety), verified by USDA Wildlife Services personnel. From there, our personnel assess the site and specific situation to determine the appropriate method(s) to be implemented. Situation dependent, sometimes this is as simple as providing "technical assistance" information, pointing out simple solutions or deterrents that someone can implement themselves to resolve the situation. When there are no practical alternatives, lethal removal is recommended, and may be implemented. USDA Wildlife Services must perform a lengthy process at the federal level, including assessing alternatives, prior to obtaining the necessary permit from the U.S. Fish and Wildlife Service.