# **Hazards of Lead**

# Eagles and condors eat carcasses and gut piles

When those remains contain lead bullet fragments, these birds eat lead and can die

#### **Lead Poisoning and Wild Birds**

Recent scientific studies show a definitive link between spent lead rifle ammunition and lead poisoning in scavenging birds. Eagles, condors, and vultures eat lead when they feed on animal carcasses or gut piles that contain toxic lead bullet fragments. Lead fragments the size of a couple of grains of rice can be lethal. Once lead enters the bloodstream, it damages a bird's nervous system and paralyzes its digestive tract. Without immediate medical assistance, poisoned scavengers can starve to death or become weak and easy prey.



#### Lead is poisoning condors

Lead exposure is the biggest obstacle to the recovery of these rare birds. Testing shows the majority of California condors routinely have blood lead levels that exceed the danger threshold for human children set by the CDC.

Nearly every bird in the wild will require emergency treatment before reaching breeding age. It's the leading cause of death.

#### The Toxic Legacy of a Single Bullet

Lead-core rifle bullets are surrounded by a thin copper jacket that peels back on impact. When the soft lead tip is exposed, it disintegrates, leaving a trail of toxic lead fragments that spread a surprising distance from the bullet's path. Lead is left behind, even when bullets exit an animal.



Non-lead bullets expand on impact just like lead bullets, but hold together, usually staying in one piece. This leaves a clean path surrounding the bullet with little or no fragmentation.



A lead-core bullet typically loses 15 - 30% of its weight as it travels through game. If eaten, the fragments from a single bullet (left) can kill several eagles and condors.



Hundreds of lead fragments scattered through a deer neck after a bullet shattered on the spine. When eagles or condors feed on wounded and unrecovered game that die, these birds can be poisoned and also die.

Every hunting season, hundreds of thousands of gut piles are left in the field. This X-ray shows some of the hundreds of lead fragments in just one gut pile from a .270 cal. Winchester lead bullet.



## Get the lead out Reducing lead ammo impacts on wildlife and humans



#### Lead Poisoning in Wildlife

In 1991, a federal law banned the use of lead shot in all waterfowl hunting, but not upland bird hunting.

Swans, doves, geese, eagles, and other birds continue to die of lead poisoning after eating spent lead fragments and shot.

Lead poisoning is a serious problem for both wildlife and humans, but is easily prevented. Historically, lead has reached us in a number of ways--through gasoline, paint, a variety of manufacturing processes, and in ammunition. As our awareness of the dangers of lead grows, we seek out better alternatives. Unfortunately, the toxic legacy of lead continues to harm wildlife.

### Safe for Humans?

Recent awareness of lead bullet fragments in processed venison raises concern for human health. Various state health departments warn pregnant women and young children to avoid eating game shot with lead ammunition.



Secondary Poisoning Any animal that eats game meat shot with lead ammo, including humans, can eat lead fragments. Lead continues to poison bald eagles, golden eagles, and other birds of prey.

For more information about scientific studies or bullet options, visit the website below.

# www.huntingwithnonlead.org



This exhibit was adapted from an original design by Aplin Uno Exhibits.