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Lead Levels in Utah Eagles MICHELLE ARNOLD, Weber State University — Lead is a health hazard to most animals, causing adverse effects to the nervous and reproductive systems if in sufficient quantity. Found in most fishing jigs and sinkers, as well as some ammunition used in hunting, this metal can poison wildlife such as eagles. Eagles are raptors, or predatory birds, and their lead exposure would most likely comes from their food – a fish which has swallowed a sinker or lead shot in carrion (dead animal matter). As part of an ongoing project to investigate the environment lead levels in Utah, the bone lead levels in the wing bones of eagles have been measured for eagle carcasses found throughout Utah. The noninvasive technique of x-ray fluorescence was used, consisting of a Cd-109 radioactive source to activate lead atoms and a HPGe detector with digital electronics to collect the gamma spectra. Preliminary results for the eagles measured to date will be presented.

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