From:

Ron Jurek

To:

Dale Steele, Jesse\_Grantham@fws.gov

Date:

8/25/2005 12:00:06 PM

Subject:

Condor discussion material

Date and Jesse,

Here are some of thoughts on some of the topics that probably will be brought up during the meetings. I might be able to send more tonight or tomorrow, but this is my only chance today to get something to you.

Chick-trash problem:

## Steps:

Adult selects from a range of possible objects
Adult ingests all or some of what attracts its attention
Objects are held for some time in the adult's crop during transport
Adult regurgitates to the chick all or some of what was in the crop
Chick selects from a range of possible regurgitated objects
Chick ingests all or some of what it selects
Chick retains all or some of what it ingests

If lead resides were present in shell casings, would they have been "cleaned off" while in the adult's esophagus and crop?

What is significance of (apparently) only one blue object in the latest case? Why no other primary colors but red? Are object colors mostly off white, reds, and brown?

Are the shinier objects really shiny or do they have just a slight gloss?

What were the colors and shininess of objects at the time the adult ingested them? (Perhaps the odd blue object wasn't blue and glossy when ingested by the adult, for example.) At the time the chick ingested them? Would a dirty or dult shell casing get clean or polished after ingested by a bird?

Are these more eggshell- and bone-like or more grinder-rock like?

Do the electrical fittings contain lead?

What small objects are captive condors in flight pens observed investigating or ingesting? Is this inate behavior or is it indicative of boredom, and would aversive training be appropriate or feasible to try to prevent it?

Cutting back on supplemental feeding in California

I support cutting back supplemental feeding in California. I'm concerned that not encouraging wild condors to forage on their own may be detrimental to the long-term survival of the subpopulation, because it encourages unnatural and possibly detrimental behaviors. The effort to entice birds to artifical feeding stations should be considered a management strategy to "discourage individuals" from foraging naturally on their own at certain times and in certain places.

It is gratifying to say there have been no deaths of free-flying condors in the state for nearly two years, but the goal for management of this condor population should not be preventing mortalities of free-flying birds at all cost. A wild population with no mortality is not a natural condition. When it comes to any known mortality factor, our responsibility is to minimize, not prevent, losses, consistent with the recovery CADFG002798

goals.

Supplemental feeding should be focused on keeping recently released birds in the release area as long as needed to enhance their early survival, and on reducing wild foraging of any birds at times when and where lead-poisoning concerns are greatest, such as around local hunting season opening and closing dates, and during known or potentially high-exposure periods, such as during June.

Cattle carcass as a possible source lead

Lead biologically incorporated in cattle tissue:

Lead poisoning is recognized by large-animal veterinarians as one of the most frequently reported causes of toxicity in cattle.

In the study to identify contaminants in condor food items in California in the 1980s, high lead levels were detected in tissues of 2 of 2 cattle placenta and in 1 of several (6 or 8?) cattle collected.

Wild-found cattle carcasses often have been fed upon by condors in California and Arizona over the past 10-15 years.

I recommend that lead-exposed cattle be considered a possible source of lead exposure in condors and encourage research to assess whether feeding on such animals may contribute to some of the reported elevated, but not lethal, lead levels in condors.

Lead shot and bullets in cattle carcasses:

Meat packers occasionally detect lead ammunition fragments (often referred to as bird shot and buck shot) during meat processing. Processors routinely use metal detectors to inspect incoming carcasses. The cattle industry has long been trying to educate cattle producers and managers about avoiding inadvertent shipping to market of cattle with lead ammunition in and under hides (e.g., project "Shot Up, Shot Down"). Measures recommended have included not shipping animals with hide wounds, reducing the opportunity for vandals to shoot at cattle, keeping hunters and predator shooters from shooting at coyotes among cattle, and keeping cowhands from herding animals by shooting at them with bird shot and shotgun pellets, as when driving animals out of thick brush. The meat industry information indicated that the cattle manager's range practices were the main source of that lead problem, not vandals or hunters. (Broken hypodermic needles left by veterinarians when inoculating cattle is the other meat-contaminating metal occasionally detected by processors.)

I recommend that cattle be considered as a potential source of lead ammunition in condors, particularly since there is more documentation in California that condors feed on found cattle remains than any other species, except possibly deer.

Wild pigs as a source of lead in condors

Despite the commonly expressed concern about condors feeding on shot wild pigs, there still is no evidence I'm aware of that free-ranging condors anyplace or at any time have ever fed on a wild pig carcass on the open range. However, I am aware of these pig-feeding stories:

- -a road-killed pig was transported to a condor release site as a supplemental food source, and some of the young condors fed on it.
- -condors possibly have feed on pig carcasses in a carcass dump in a hunting area.

I recommend that animals fed upon by condors in an artifical feeding situation, such as a Caltrans deer dumping site, a condor release site, a dump, a hunting camp carcass dump, a mass mortality from

CADFG002799

poisoning or pest shooting (e.g., ground squirrel shooting) be considered as a separate feeding category from animals found by condors on the open range, when comparing species as condor food, or as a lead or other contaminant source. For example, a lone, dead ground squirrel would not be considered to be a common or even documented condor food source, since the documented or possible sources of ground squirrels as condor food have been of those killed in large numbers in discrete areas.

Ron