Ms. Susan Maret

Dear Ms. Maret:

As a follow up to your Freedom of Information Act (FOIA) request of February 25, 1993, enclosed is the available information regarding fortuitous specimens collected by the U.S. Fish and Wildlife Service (Service) on Rocky Mountain Arsenal National Wildlife Area (Arsenal). As you may recall, the Service stated in its letter to you dated March 15, 1993, that this office was in the midst of organizing and summarizing records referencing fortuitous specimen collections, necropsies, and chemical residue analyses.

This summary does not include specimens collected deliberately (e.g., deer for the 1991 Deer Health Study), specimens collected by Service personnel off-Post or specimens delivered to this office by outside entities. You will note that many fortuitous specimens were disposed of without analysis. The reasons for disposal included the lack of value of the sample relative to sampling design, the fact that many of the specimens were in advanced stages of decay and were not suitable for necropsy or chemical residue analyses, and the fact that the cause of death was apparent (e.g., roadkill, electrocution, or predation) in many cases.

Many personnel in addition to Service staff are continually observant for animal mortalities at the Arsenal. The Service is in continuous contact with various contractors and Army personnel numbering several hundred individuals with regard to this issue. On a day by day basis the Arsenal is probably one of the most scrutinized areas in the country as to evidence of any wildlife losses. Accordingly, the nature of wildlife population dynamics, as influenced by recruitment and naturally occurring turnover, guarantees that the remains of various animals will be encountered on a regular basis at an intensively studied area like the Arsenal. In short, the occurrence of 244 instances of wildlife mortality at the Arsenal over the past 5 years as shown in our records means little in itself. More important are the conclusions drawn from this data as to vulnerable species, areas of concerns, and the perspectives to be gained by contrasting unusual versus naturally occurring mortality patterns.

Following our current procedures, fortuitous specimens of birds of prey, all migratory birds, mammalian predators, and other species of interest that are in adequate condition for necropsy, including specimens that have been archived in Service freezers, will be sent to the Colorado State University Veterinary Pathology Laboratory for necropsy. Additionally, if there is
reason to suspect that a toxic substance may have contributed to animal mortality, tissues will be returned to the Service after necropsy. These tissues will then be submitted for chemical residue analyses.

If you have any questions please contact Richard Roy at 289-0232.

Sincerely,

[Signature]

Donald R. Gober
Project Leader

Copies furnished:

Mr. John Spinks, Deputy Regional Director, U.S. Fish and Wildlife Service,
Denver Federal Center, P.O. Box 25486, Denver, Colorado 80225
Mr. Elliot Sutta, Assistant Regional Director, U.S. Fish and Wildlife Service,
Denver Federal Center, P.O. Box 25486, Denver, Colorado 80225

Enclosures:

Fortuitous Specimen Summaries  Attachments 1 – 5
Special Purpose Salvage Log  21 pages

Necropsy reports:

* Case 11088-1 – 2 pages; Case 11088-2 – 2 pages; Case 10943 – 2 pages; Case 923-5002 – 8 pages; Case - 09206154 – 1 page; Case 912-21430 – 2 pages; Case - 2336 – 1 page; Case 10802 – 3 pages; Case 923-856 – 2 pages; Case 912-22822 – 2 pages; Case 912-21430 – 2 pages; Case 912-19496 – 2 pages; Case 912-4879 – 2 pages; Case 912-4555 – 2 pages; Case 901-21736 – 2 pages; Case 901-17203 – 2 pages; Case 901-16992 – 1 page; Case 901-14668 – 4 pages; Case 901-13120 – 3 pages; Case 901-12482 – 2 pages; Case 901-11125 – 2 pages; Case 901-9135 – 2 pages; Case 901-8085 – 3 pages; Case 901-01535 – 6 pages

Field Post-Mortem Examination: July 19, 1990

* Please note that double sided pages are referenced as 2 pages.
SUMMARY OF FORTUITOUS SPECIMENS
COLLECTED BY FWS ON ROCKY MOUNTAIN ARSENAL
1989-1993

BIRDS:
Total number of birds collected on RMA = 192
Total number of birds of prey = 66
Total number of other bird species = 126
Total number of birds submitted for necropsy = 24
Total number of birds archived = 35
Total number of birds discarded = 126\(^1\)
Total number of birds mounted = 7
Total number submitted for rehabilitation = 9
Total number of birds submitted for chemical residue analyses = 1

MAMMALS:
Total number of mammals collected on RMA = 52
Total number necropsied = 10
Total number archived = 9
Total number discarded = 32\(^1\)
Total number submitted for chemical residue analyses = 1

\(^1\) Many specimens were too decomposed to submit for necropsy or chemical residue analyses.
Attachment #5 to letter dated May 15, 1993 from U.S. Fish and Wildlife Service at the Rocky Mountain Arsenal National Wildlife Area to Ms. Susan Maret.

BREAKDOWN OF THE CAUSES OF DEATH (KNOWN OR SUSPECTED) OF MAMMALS COLLECTED FORTUITOUSLY FROM ROCKY MOUNTAIN ARSENAL 1989-1993

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadkill</td>
<td>11</td>
</tr>
<tr>
<td>Unintentional (caught in small mammal trap)</td>
<td>18</td>
</tr>
<tr>
<td>Predation</td>
<td>6</td>
</tr>
<tr>
<td>Poaching</td>
<td>3</td>
</tr>
<tr>
<td>Disease</td>
<td>5</td>
</tr>
<tr>
<td>Starvation</td>
<td>3</td>
</tr>
<tr>
<td>Toxic chemicals&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1</td>
</tr>
</tbody>
</table>

<sup>1</sup> Badger, suspected dieldrin poisoning.
BREAKDOWN BY SPECIES OF THE NUMBER OF BIRDS COLLECTED
FORTUITOUSLY ON THE ARSENAL 1989-1993

Black-crowned night heron: 3
Mallard duck: 3
Ring-necked pheasant: 9
Canada Goose: 3
Lesser scaup: 1
Western Meadowlark: 5
Great horned owl: 21
Harlan's/Red-tailed hawk: 16
Burrowing owl: 2
Pine siskin: 1
Blue-winged teal: 2
Mourning dove: 9
American kestrel: 10
Western grebe: 2
European starling: 31
Great blue heron: 2
Flicker: 1
Kingbird: 1
Magpie: 11
House finch: 12
Ferruginous hawk: 3
Barn owl: 8

American robin: 14
Unk. Passerines: 5\(^1\)
Lark bunting: 1
Unk. hawk: 1\(^1\)
Long-eared owl: 1
Prairie falcon: 1
Swainson's hawk: 1
Oriole: 1
American coot: 1
Common Grackle: 7
Bald Eagle: 1
Golden Eagle: 1
Red head duck: 1

\(^1\) Specimens too decomposed to ID
Attachment #4 to letter dated May 15, 1993 from U.S. Fish and Wildlife Service at the Rocky Mountain Arsenal National Wildlife Area to Ms. Susan Maret.

**BREAKDOWN OF THE CAUSES OF DEATH (KNOWN OR SUSPECTED) OF MIGRATORY BIRDS COLLECTED FORTUITOUSLY FROM ROCKY MOUNTAIN ARSENAL 1989-1993**

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrocution</td>
<td>19</td>
</tr>
<tr>
<td>Roadkill</td>
<td>6</td>
</tr>
<tr>
<td>Collision with buildings, powerlines etc.</td>
<td>21</td>
</tr>
<tr>
<td>Unknown(^1),(^2)</td>
<td>109</td>
</tr>
<tr>
<td>Predation</td>
<td>8</td>
</tr>
<tr>
<td>Accidental death (drowned in net, caught in fishing line, fell out of nest, etc.)</td>
<td>13</td>
</tr>
<tr>
<td>Trapped in buildings</td>
<td>12</td>
</tr>
<tr>
<td>Disease/parasite</td>
<td>3</td>
</tr>
<tr>
<td>Poaching</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^1\) Many specimens were too decomposed to assess cause of death.

\(^2\) Specimens too decomposed to identify species.
Attachment #3 to letter dated May 15, 1993 from U.S. Fish and Wildlife Service at the Rocky Mountain Arsenal National Wildlife Area to Ms. Susan Maret.

BREAKDOWN BY SPECIES OF THE NUMBER OF MAMMALS COLLECTED FORTUITOUSLY ON THE ARSENA 1989-1993

Little brown bat: 1
Cotton tail rabbit: 9
13-lined ground squirrel: 2
Mule deer: 11
White-tailed deer: 3
Kangaroo rat: 8
Coyote: 10
Black-tailed jack rabbit: 1
Badger: 4
Black-tailed Prairie dog: 3