

# Status of Birds at the Hanford Site in Southeastern Washington

Prepared for the U.S. Department of Energy  
Office of Environmental Restoration and  
Waste Management



**Westinghouse**  
**Hanford Company** Richland, Washington

Hanford Operations and Engineering Contractor for the  
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## STATUS OF BIRDS AT THE HANFORD SITE IN SOUTHEASTERN WASHINGTON

D. S. Landeen  
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## ABSTRACT

*The Department of Energy has recently entered into agreements with the Washington State Department of Ecology, the Environmental Protection Agency, and Hanford Site contractors to focus work activities on cleanup and stabilization of radioactive and hazardous waste sites located at the Hanford Site in southeastern Washington. A list of 235 known birds that have been observed at the Hanford Site is given along with a status rating for abundance and seasonal occurrence. Previously published bird lists from the Hanford Site are included as well as the author observations from 1977 to 1990. Of the 235 species listed, 35 are considered common and 38 are listed as accidentals. All but nine birds on the Hanford Site list have previously been documented by the Audubon Society to occur within a 25-mile radius of the Tri-Cities. The nine birds that are not on the Audubon list, however, have been documented in other parts of eastern Washington. A list of hypothetical birds that have been documented within 50 miles of the Hanford Site but not actually observed at the Site is also provided. This is the most complete list of birds published to date from the Hanford Site and substantially augments other previously published lists by almost 100 species.*

*Key words: Hanford, Birds, Columbia River, Washington*

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## STATUS OF BIRDS AT THE HANFORD SITE IN SOUTHEASTERN WASHINGTON

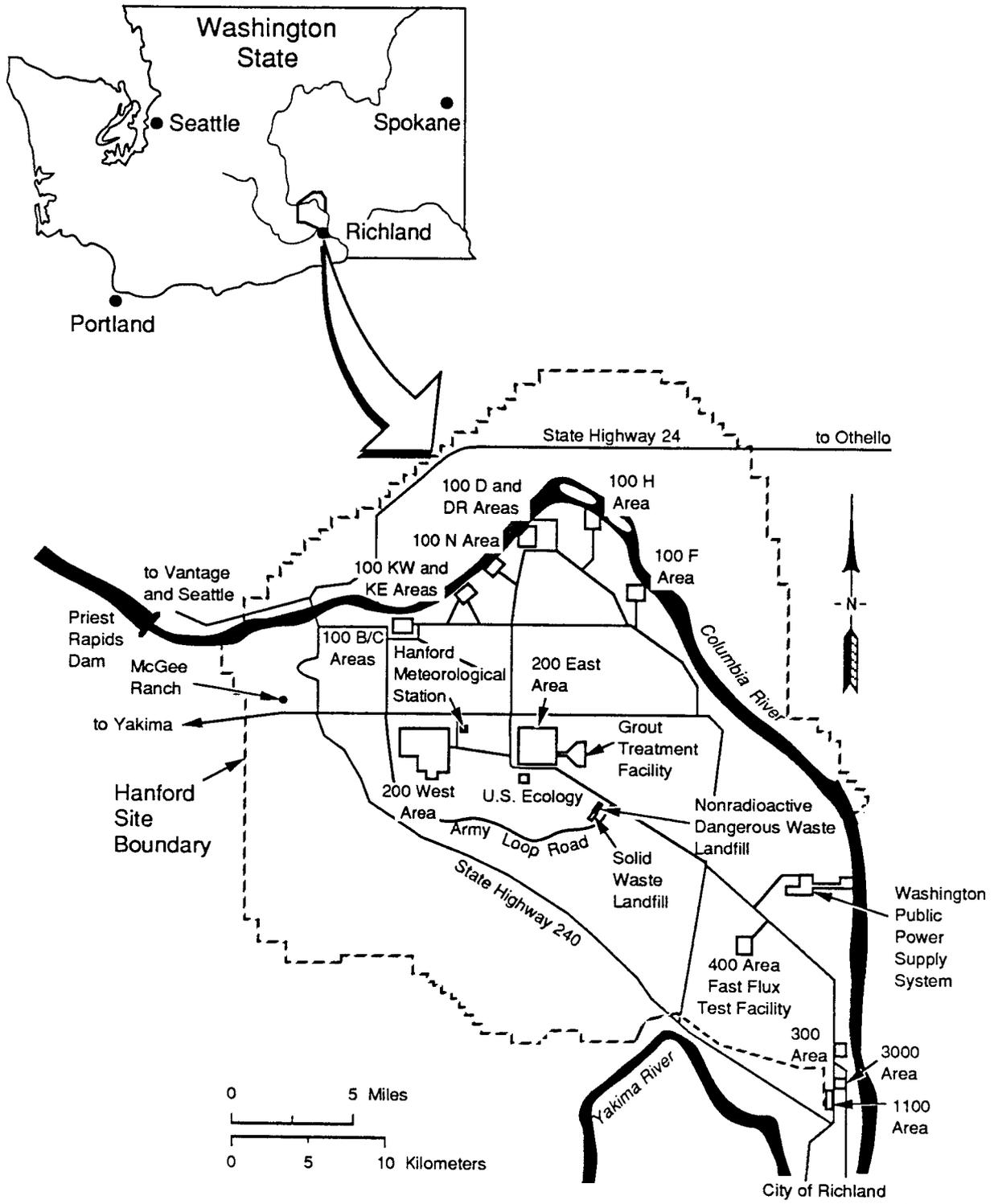
## 1.0 INTRODUCTION

Recent agreements with the Washington State Department of Ecology, Environmental Protection Agency and onsite Hanford contractors are now focusing on the cleanup and stabilization of all radioactive and hazardous waste sites located at the Hanford Site. In view of these future cleanup and restoration objectives it becomes very important to document the various wildlife species that have been observed at the site. This report contains a complete list of all the birds that have been observed at the Hanford Site.

The Hanford Site, which currently consists of 1,476 square kilometers ( $\text{km}^2$ ) in southcentral Washington, was established in 1943 as a national security area for the production of plutonium used in nuclear weapons (Figure 1). In 1968, the Atomic Energy Commission designated 311  $\text{km}^2$  of the area as an Arid Lands Ecology Reserve. During the 1970's, about 130  $\text{km}^2$  north of the Columbia River were leased to the United States Fish and Wildlife Service for the Saddle Mountain National Wildlife Refuge, and about 200  $\text{km}^2$  north and east of the river were leased to the Washington Department of Game to be used for outdoor recreation. In 1977 the Site was designated as a National Environmental Research Park by the United States Energy Research and Development Administration. The Hanford Site is one of the few large areas of land in the region that has not been developed for agricultural use. It is also unique in that the general public's use of the area is very restricted and in the past has been limited to projects associated with the nuclear industry. The area in which the Hanford Site is located is bounded on the north by the Saddle Mountains, on the east by the Columbia River, and on the south and west by the Yakima River and Rattlesnake Hills, respectively. The dominant topographical features of the Hanford Site include the Rattlesnake Hills (elevation 1,090 m), the Columbia River and associated aquatic habitats, unstabilized sand dunes near the Columbia River, basaltic ridges that interrupt the rolling landscape of the Site, and the 200 Area plateau (elevation 200 m), which is the location of the most manmade perturbations.

The climate at the Hanford Site is probably the hottest and driest in the Pacific Northwest. The climate is strongly influenced by the Cascade Mountain Range to the west, which forms a barrier to moisture-laden storms from the Pacific Ocean. July is the hottest and driest month, and January is the coldest and wettest. Annual precipitation averages slightly less than 17.8 cm with 42% of that amount falling between November and January. The average annual temperature is 11.7 °C; temperatures in excess of 38 °C and below 0 °C are common.

The Hanford Site has been classified primarily as a shrub-steppe grassland (Daubenmire 1970) and is composed of a variety of plant communities. Major plant species composing these communities include sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), Sandberg's bluegrass (*Poa sandbergii*), cheatgrass (*Bromus tectorum*) and rabbitbrush species (*Chrysothamnus* sp.).



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Figure 1. Location of the Hanford Site.

The principal bodies of water associated with the Hanford Site include the last free-flowing stretch of the Columbia River in the United States and several ponds and ditches that result from the operation of nuclear facilities. The Columbia River is not only an important salmon, steelhead, and bass fishery; its many islands also serve as nesting grounds for Canada Geese and other waterfowl. All the ponds and ditches are unique to this area, because they were created as a result of man's activities and attract many animal species, particularly birds, that would not otherwise be found here. The total aquatic habitat aside from that provided by the Columbia River system is approximately 57 ha.

## 2.0 METHODS AND DISCUSSION

The bird occurrence information reported here represents the authors' field observations from numerous site characterization efforts conducted throughout the general Hanford Site environs from 1977 to 1990, as well as previously published documents. Previous Hanford Site documents and journal articles that have reported bird occurrences were limited to specific areas of the Hanford Site such as the Columbia River (Fickeisen et al. 1980; Books 1985; Hanson 1958, 1969, 1970), Hanford Site waste ponds (Fitzner and Price 1973; Fitzner and Rickard 1975), Arid Lands Ecology Reserve (Rotenberry et al. 1979; Vaughan 1978; Rickard 1964) and other specific sites (Schuler et al. 1988; Fitzner et al. 1981).

The taxonomy in this report is taken from the latest *American Ornithologist's Union Checklist of North American Birds*, which was published in the 35th, 36th and 37th supplements to the *Auk* (1985, 1987, 1989). Other sources of information that were used to document previous occurrences of birds in Washington State were Weber and Larrison 1977, Larrison and Sonnenberg 1968 and Jewett et al. 1953. Bird occurrences are presented in Table 1 and listed according to family, genus species, common name, and status. Table 1 presents 41 families and 235 species. Of these 235 species 35 are considered common and 38 are listed as accidentals. All but nine of these birds have been previously documented to occur in the Tri-Cities area by the Audubon Society. However, these nine birds have been documented previously in Eastern Washington. Table 2 provides the observation dates and locations of the birds that have been listed as accidentals. Table 3 lists the birds that are hypothetical to the Hanford Site. Hypothetical for the purpose of this report means birds that have been documented to occur within 50 miles of the Hanford Site but have never been actually observed at Hanford.

The scaled quail listed here is a sighting of a single covey, by Hanson, in 1956. No sighting of the scaled quail has been recorded since. Scaled quail were introduced into various areas of eastern Washington many years ago by the Washington State Department of Game. The Philadelphia Vireo, which was seen on 3 occasions in 1983, has only been previously reported in the state on one other occasion, in Richland, Washington in 1975 (Weber and Larrison 1977). This is the most complete list of birds ever published from the Hanford Site and substantially augments all other previously published lists by almost 100 species.

A status rating is given for abundance and seasonal occurrence for each species as follows:

Abundance:

- C - common--often seen or heard in appropriate habitat.
- U - uncommon--usually present but not always seen or heard.
- R - rare--present in appropriate habitats only in small numbers; seldom seen or heard.
- A - accidental--appeared once or twice, but well out of normal range.

Seasonal Occurrence:

- r - resident--present all year but abundance may vary seasonally.
- s - summer visitor (includes spring and fall).
- w - winter visitor (includes spring and fall).
- m - migrant.

Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 1 of 11)

| Family            | Common name                 | Genus species                    | Status |
|-------------------|-----------------------------|----------------------------------|--------|
| Gaviidae          |                             |                                  |        |
|                   | Pacific Loon                | <i>Gavia pacifica</i>            | Rw     |
|                   | Common Loon                 | <i>Gavia immer</i>               | Rw     |
| Podicipedidae     |                             |                                  |        |
|                   | Pied-billed Grebe           | <i>Podilymbus podiceps</i>       | Cr     |
|                   | Horned Grebe                | <i>Podiceps auritus</i>          | Uw     |
|                   | Eared Grebe                 | <i>Podiceps nigricollis</i>      | Um     |
|                   | Western Grebe               | <i>Aechmophorus occidentalis</i> | Ur     |
|                   | Clark's Grebe               | <i>Aechmophorus clarkii</i>      | Rm     |
| Pelecanidae       |                             |                                  |        |
|                   | American White Pelican      | <i>Pelecanus erythrorhynchos</i> | Ur     |
| Phalacrocoracidae |                             |                                  |        |
|                   | Double-crested Cormorant    | <i>Phalacrocorax auritus</i>     | Ur     |
| Ardeidae          |                             |                                  |        |
|                   | American Bittern            | <i>Botaurus lentiginosus</i>     | Rs     |
|                   | Great Blue Heron            | <i>Ardea herodias</i>            | Cr     |
|                   | Snowy Egret                 | <i>Egretta thula</i>             | Rm     |
|                   | Great Egret                 | <i>Casmerodius albus</i>         | Rm     |
|                   | Black-crowned Night-Heron   | <i>Nycticorax nycticorax</i>     | Ur     |
| Anatidae          |                             |                                  |        |
|                   | Tundra Swan                 | <i>Cygnus columbianus</i>        | Rw     |
|                   | Trumpeter Swan              | <i>Cygnus buccinator</i>         | Am     |
|                   | Greater White-fronted Goose | <i>Anser albifrons</i>           | Rm     |
|                   | Snow Goose                  | <i>Chen caerulescens</i>         | Rw     |
|                   | Canada Goose                | <i>Branta canadensis</i>         | Cr     |
|                   | Brant                       | <i>Branta bernicla</i>           | Am     |
|                   | Green-winged Teal           | <i>Anas crecca</i>               | Us     |

## Abundance:

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## Seasonal occurrence:

- r - resident--present all year but abundance may vary seasonally
- s - summer visitor (includes spring and fall)
- w - winter visitor (includes spring and fall)
- m - migrant.

Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 2 of 11)

| Family               | Common name            | Genus species                   | Status |
|----------------------|------------------------|---------------------------------|--------|
| Anatidae (continued) |                        |                                 |        |
|                      | Mallard                | <i>Anas platyrhynchos</i>       | Ra     |
|                      | Northern Pintail       | <i>Anas acuta</i>               | Cw     |
|                      | Blue-winged Teal       | <i>Anas discors</i>             | Rm     |
|                      | Cinnamon Teal          | <i>Anas cyanoptera</i>          | Us     |
|                      | Northern Shoveler      | <i>Anas clypeata</i>            | Cr     |
|                      | Gadwall                | <i>Anas strepera</i>            | Uw     |
|                      | Eurasian Wigeon        | <i>Anas penelope</i>            | Rw     |
|                      | American Wigeon        | <i>Anas americana</i>           | Cw     |
|                      | Canvasback             | <i>Aythya valisineria</i>       | Uw     |
|                      | Redhead                | <i>Aythya americana</i>         | Cw     |
|                      | Ring-necked Duck       | <i>Aythya collaris</i>          | Uw     |
|                      | Lesser Scaup           | <i>Aythya affinis</i>           | Uw     |
|                      | Greater Scaup          | <i>Aythya marila</i>            | Rw     |
|                      | Oldsquaw               | <i>Clangula hyemalis</i>        | Rw     |
|                      | Common Goldeneye       | <i>Bucephala clangula</i>       | Uw     |
|                      | Barrow's Goldeneye     | <i>Bucephala islandica</i>      | Rw     |
|                      | Bufflehead             | <i>Bucephala albeola</i>        | Cw     |
|                      | Hooded Merganser       | <i>Lophodytes cucullatus</i>    | Rw     |
|                      | Common Merganser       | <i>Mergus merganser</i>         | Cw     |
|                      | Red-breasted Merganser | <i>Mergus serrator</i>          | Aw     |
|                      | Ruddy Duck             | <i>Oxyura jamaicensis</i>       | Ur     |
| Cathartidae          |                        |                                 |        |
|                      | Turkey Vulture         | <i>Cathartes aura</i>           | Am     |
| Accipitridae         |                        |                                 |        |
|                      | Osprey                 | <i>Pandion haliaetus</i>        | Um     |
|                      | Bald Eagle             | <i>Haliaeetus leucocephalus</i> | Uw     |

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Seasonal occurrence:

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- m - migrant.

Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 3 of 11)

| Family                   | Common name          | Genus species                    | Status |
|--------------------------|----------------------|----------------------------------|--------|
| Accipitridae (continued) |                      |                                  |        |
|                          | Northern Harrier     | <i>Circus cyaneus</i>            | Ur     |
|                          | Sharp-shinned Hawk   | <i>Accipiter striatus</i>        | Rw     |
|                          | Cooper's Hawk        | <i>Accipiter cooperii</i>        | Rw     |
|                          | Northern Goshawk     | <i>Accipiter gentilis</i>        | Rw     |
|                          | Swainson's Hawk      | <i>Buteo swainsoni</i>           | Us     |
|                          | Red-tailed Hawk      | <i>Buteo jamaicensis</i>         | Ur     |
|                          | Ferruginous Hawk     | <i>Buteo regalis</i>             | Rs     |
|                          | Rough-legged Hawk    | <i>Buteo lagopus</i>             | Rw     |
|                          | Golden Eagle         | <i>Aquila chrysaetos</i>         | Um     |
| Falconidae               |                      |                                  |        |
|                          | American Kestrel     | <i>Falco sparverius</i>          | Ur     |
|                          | Merlin               | <i>Falco columbarius</i>         | Rm     |
|                          | Peregrine Falcon     | <i>Falco peregrinus</i>          | Am     |
|                          | Gyr Falcon           | <i>Falco rusticolus</i>          | Aw     |
|                          | Prairie Falcon       | <i>Falco mexicanus</i>           | Ur     |
| Phasianidae              |                      |                                  |        |
|                          | Gray Partridge       | <i>Perdix perdix</i>             | Rr     |
|                          | Chukar               | <i>Alectoris chukar</i>          | Ur     |
|                          | Ring-necked Pheasant | <i>Phasianus colchicus</i>       | Ur     |
|                          | Sage Grouse          | <i>Centrocercus urophasianus</i> | Rr     |
|                          | Northern Bobwhite    | <i>Colinus virginianus</i>       | Am     |
|                          | Scaled Quail         | <i>Callipepla squamata</i>       | Rr     |
|                          | California Quail     | <i>Callipepla californica</i>    | Ur     |
| Rallidae                 |                      |                                  |        |
|                          | Virginia Rail        | <i>Rallus limicola</i>           | Rr     |
|                          | Sora                 | <i>Porzana carolina</i>          | Rs     |

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Seasonal occurrence:

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Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 4 of 11)

| Family               | Common name            | Genus species                  | Status |
|----------------------|------------------------|--------------------------------|--------|
| Rallidae (continued) |                        |                                |        |
|                      | American Coot          | <i>Fulica americana</i>        | Cr     |
| Gruidae              |                        |                                |        |
|                      | Sandhill Crane         | <i>Grus canadensis</i>         | Um     |
| Charadriidae         |                        |                                |        |
|                      | Blackbellied Plover    | <i>Pluvialis squatarola</i>    | Am     |
|                      | Killdeer               | <i>Charadrius vociferus</i>    | Cr     |
|                      | Mountain Plover        | <i>Charadrius montanus</i>     | Am     |
| Recurvirostridae     |                        |                                |        |
|                      | American Avocet        | <i>Recurvirostra americana</i> | Us     |
| Scolopacidae         |                        |                                |        |
|                      | Greater Yellowlegs     | <i>Tringa melanoleuca</i>      | Um     |
|                      | Lesser Yellowlegs      | <i>Tringa flavipes</i>         | Um     |
|                      | Solitary Sandpiper     | <i>Tringa solitaria</i>        | Rm     |
|                      | Spotted Sandpiper      | <i>Actitis macularia</i>       | Um     |
|                      | Long-billed Curlew     | <i>Numenius americanus</i>     | Cs     |
|                      | Marbled Godwit         | <i>Limosa fedoa</i>            | Am     |
|                      | Sanderling             | <i>Calidris alba</i>           | Um     |
|                      | Semipalmated Sandpiper | <i>Calidris pusilla</i>        | Rm     |
|                      | Western Sandpiper      | <i>Calidris mauri</i>          | Cm     |
|                      | Least Sandpiper        | <i>Calidris minutilla</i>      | Cm     |
|                      | Baird's Sandpiper      | <i>Calidris bairdii</i>        | Rm     |
|                      | Pectoral Sandpiper     | <i>Calidris melanotos</i>      | Um     |
|                      | Sharp-tailed Sandpiper | <i>Calidris acuminata</i>      | Am     |
|                      | Dunlin                 | <i>Calidris alpina</i>         | Um     |
|                      | Long-billed Dowitcher  | <i>Limnodromus scolopaceus</i> | Cm     |
|                      | Common Snipe           | <i>Gallinago gallinago</i>     | Rr     |

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(sheet 5 of 11)

| Family                   | Common name          | Genus species                   | Status |
|--------------------------|----------------------|---------------------------------|--------|
| Scolopacidae (continued) |                      |                                 |        |
|                          | Wilson's Phalarope   | <i>Phalaropus tricolor</i>      | Us     |
|                          | Red-necked Phalarope | <i>Phalaropus lobatus</i>       | Um     |
|                          | Red Phalarope        | <i>Phalaropus fulicaria</i>     | Am     |
| Laridae                  |                      |                                 |        |
|                          | Parasitic Jaeger     | <i>Stercorarius parasiticus</i> | Am     |
|                          | Long-tailed Jaeger   | <i>Stercorarius longicaudus</i> | Am     |
|                          | Franklin's Gull      | <i>Larus pipixcan</i>           | Rm     |
|                          | Bonaparte's Gull     | <i>Larus philadelphia</i>       | Um     |
|                          | Ring-billed Gull     | <i>Larus delawarensis</i>       | Cr     |
|                          | California Gull      | <i>Larus californicus</i>       | Cr     |
|                          | Herring Gull         | <i>Larus argentatus</i>         | Aw     |
|                          | Glaucous-winged Gull | <i>Larus glaucescens</i>        | Uw     |
|                          | Sabine's Gull        | <i>Xema sabini</i>              | Rm     |
|                          | Caspian Tern         | <i>Sterna caspia</i>            | Rs     |
|                          | Common Tern          | <i>Sterna hirundo</i>           | Rm     |
|                          | Forster's Tern       | <i>Sterna forsteri</i>          | Us     |
|                          | Arctic Tern          | <i>Sterna paradisaea</i>        | Am     |
| Columbidae               |                      |                                 |        |
|                          | Rock Dove            | <i>Columba livia</i>            | Cr     |
|                          | Band-tailed Pigeon   | <i>Columba fasciata</i>         | Am     |
|                          | Mourning Dove        | <i>Zenaida macroura</i>         | Cs     |
| Tytonidae                |                      |                                 |        |
|                          | Barn Owl             | <i>Tyto alba</i>                | Ur     |
| Strigidae                |                      |                                 |        |
|                          | Flammulated Owl      | <i>Otus flammeolus</i>          | Am     |

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- m - migrant.

Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 6 of 11)

| Family                | Common name               | Genus species                   | Status |
|-----------------------|---------------------------|---------------------------------|--------|
| Strigidae (continued) |                           |                                 |        |
|                       | Western Screech-Owl       | <i>Otus kennicottii</i>         | Am     |
|                       | Great Horned Owl          | <i>Bubo virginianus</i>         | Ur     |
|                       | Barred Owl                | <i>Strix varia</i>              | Am     |
|                       | Snowy Owl                 | <i>Nyctea scandiaca</i>         | Rw     |
|                       | Burrowing Owl             | <i>Athene cunicularia</i>       | Us     |
|                       | Long-eared Owl            | <i>Asio otus</i>                | Ur     |
|                       | Short-eared Owl           | <i>Asio flammeus</i>            | Ur     |
|                       | Northern Saw-whet Owl     | <i>Aegolius acadicus</i>        | Am     |
| Caprimulgidae         |                           |                                 |        |
|                       | Common Nighthawk          | <i>Chordeiles minor</i>         | Cs     |
|                       | Common Poorwill           | <i>Phalaenoptilus nuttallii</i> | Am     |
| Apodidae              |                           |                                 |        |
|                       | White-throated Swift      | <i>Aeronautes saxatalis</i>     | Rs     |
| Trochilidae           |                           |                                 |        |
|                       | Black-chinned Hummingbird | <i>Archilochus alexandri</i>    | Am     |
|                       | Calliope Hummingbird      | <i>Stellula calliope</i>        | Um     |
|                       | Rufous Hummingbird        | <i>Selasphorus rufus</i>        | Um     |
| Alcedinidae           |                           |                                 |        |
|                       | Belted Kingfisher         | <i>Ceryle alcyon</i>            | Ur     |
| Picidae               |                           |                                 |        |
|                       | Lewis' Woodpecker         | <i>Melanerpes lewis</i>         | Rm     |
|                       | Downy Woodpecker          | <i>Picoides pubescens</i>       | Rw     |
|                       | Hairy Woodpecker          | <i>Picoides villosus</i>        | Rw     |
|                       | Northern Flicker          | <i>Colaptes auratus</i>         | Ur     |
| Tyrannidae            |                           |                                 |        |
|                       | Olive-sided Flycatcher    | <i>Contopus borealis</i>        | Rm     |

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Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 7 of 11)

| Family                 | Common name                   | Genus species                     | Status |
|------------------------|-------------------------------|-----------------------------------|--------|
| Tyrannidae (continued) |                               |                                   |        |
|                        | Western Wood-Pewee            | <i>Contopus sordidulus</i>        | Um     |
|                        | Willow Flycatcher             | <i>Empidonax traillii</i>         | Rm     |
|                        | Dusky Flycatcher              | <i>Empidonax oberholseri</i>      | Rm     |
|                        | Cordilleran Flycatcher        | <i>Empidonax occidentalis</i>     | Um     |
|                        | Say's Phoebe                  | <i>Sayornis saya</i>              | Us     |
|                        | Black Phoebe                  | <i>Sayornis nigricans</i>         | Am     |
|                        | Ash-throated Flycatcher       | <i>Myiarchus cinerascens</i>      | Rs     |
|                        | Western Kingbird              | <i>Tyrannus verticalis</i>        | Cs     |
|                        | Eastern Kingbird              | <i>Tyrannus tyrannus</i>          | Us     |
| Alaudidae              |                               |                                   |        |
|                        | Horned Lark                   | <i>Eremophila alpestris</i>       | Cr     |
| Hirundinidae           |                               |                                   |        |
|                        | Tree Swallow                  | <i>Tachycineta bicolor</i>        | Um     |
|                        | Violet-green Swallow          | <i>Tachycineta thalassina</i>     | Rm     |
|                        | Northern Rough-winged Swallow | <i>Stelgidopteryx serripennis</i> | Us     |
|                        | Bank Swallow                  | <i>Riparia riparia</i>            | Us     |
|                        | Cliff Swallow                 | <i>Hirundo pyrrhonota</i>         | Cs     |
|                        | Barn Swallow                  | <i>Hirundo rustica</i>            | Cs     |
| Corvidae               |                               |                                   |        |
|                        | Steller's Jay                 | <i>Cyanocitta stelleri</i>        | Rw     |
|                        | Scrub Jay                     | <i>Aphelocoma coerulescens</i>    | Am     |
|                        | Clark's Nutcracker            | <i>Nucifraga columbiana</i>       | Rm     |
|                        | Black-billed Magpie           | <i>Pica pica</i>                  | Cr     |
|                        | American Crow                 | <i>Corvus brachyrhynchos</i>      | Ur     |
|                        | Common Raven                  | <i>Corvus corax</i>               | Cr     |

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Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 8 of 11)

| Family        | Common name              | Genus species                  | Status |
|---------------|--------------------------|--------------------------------|--------|
| Paridae       | Blacked-capped Chickadee | <i>Parus atricapillus</i>      | Um     |
| Sittidae      | Red-breasted Nuthatch    | <i>Sitta canadensis</i>        | Ur     |
| Troglodytidae | Rock Wren                | <i>Salpinctes obsoletus</i>    | Us     |
|               | Canyon Wren              | <i>Catherpes mexicanus</i>     | Rs     |
|               | Bewick's Wren            | <i>Thryomanes bewickii</i>     | Rs     |
|               | House Wren               | <i>Troglodytes aedon</i>       | Rs     |
|               | Winter Wren              | <i>Troglodytes troglodytes</i> | Rw     |
|               | Marsh Wren               | <i>Cistothorus palustris</i>   | Ur     |
| Muscicapidae  | Golden-crowned Kinglet   | <i>Regulus satrapa</i>         | Uw     |
|               | Ruby-crowned Kinglet     | <i>Regulus calendula</i>       | Uw     |
|               | Western Bluebird         | <i>Sialia mexicana</i>         | Rm     |
|               | Mountain Bluebird        | <i>Sialia currucoides</i>      | Rm     |
|               | Townsend's Solitaire     | <i>Myadestes townsendi</i>     | Rw     |
|               | Swainson's Thrush        | <i>Catharus ustulatus</i>      | Rm     |
|               | Hermit Thrush            | <i>Catharus guttatus</i>       | Uw     |
|               | American Robin           | <i>Turdus migratorius</i>      | Cr     |
|               | Varied Thrush            | <i>Ixoreus naevius</i>         | Rw     |
| Mimidae       | Gray Catbird             | <i>Dumetella carolinensis</i>  | Am     |
|               | Northern Mockingbird     | <i>Mimus polyglottos</i>       | Am     |
|               | Sage Thrasher            | <i>Oreoscoptes montanus</i>    | Rs     |
| Motacillidae  | American Pipit           | <i>Anthus rubescens</i>        | Um     |

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Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 9 of 11)

| Family        | Common name            | Genus species                | Status |
|---------------|------------------------|------------------------------|--------|
| Bombycillidae |                        |                              |        |
|               | Bohemian Waxwing       | <i>Bombycilla garrulus</i>   | Rw     |
|               | Cedar Waxwing          | <i>Bombycilla cedrorum</i>   | Uw     |
| Laniidae      |                        |                              |        |
|               | Northern Shrike        | <i>Lanius excubitor</i>      | Uw     |
|               | Loggerhead Shrike      | <i>Lanius ludovicianus</i>   | Us     |
| Sturnidae     |                        |                              |        |
|               | European Starling      | <i>Sturnus vulgaris</i>      | Cr     |
| Vireonidae    |                        |                              |        |
|               | Solitary Vireo         | <i>Vireo solitarius</i>      | Um     |
|               | Hutton's Vireo         | <i>Vireo huttoni</i>         | Am     |
|               | Warbling Vireo         | <i>Vireo gilvus</i>          | Um     |
|               | Philadelphia Vireo     | <i>Vireo philadelphicus</i>  | Am     |
|               | Red-eyed Vireo         | <i>Vireo olivaceus</i>       | Um     |
| Emberizidae   |                        |                              |        |
|               | Tennessee Warbler      | <i>Vermivora peregrina</i>   | Am     |
|               | Orange-crowned Warbler | <i>Vermivora celata</i>      | Um     |
|               | Nashville Warbler      | <i>Vermivora ruficapilla</i> | Rm     |
|               | Yellow Warbler         | <i>Dendroica petechia</i>    | Us     |
|               | Yellow-rumped Warbler  | <i>Dendroica coronata</i>    | Cw     |
|               | Townsend's Warbler     | <i>Dendroica townsendi</i>   | Um     |
|               | Palm Warbler           | <i>Dendroica palmarum</i>    | Am     |
|               | American Redstart      | <i>Setophaga ruticilla</i>   | Am     |
|               | MacGillivray's Warbler | <i>Oporornis tolmiei</i>     | Um     |
|               | Common Yellowthroat    | <i>Geothlypis trichas</i>    | Rm     |
|               | Wilson's Warbler       | <i>Wilsonia pusilla</i>      | Um     |
|               | Yellow-breasted Chat   | <i>Icteria virens</i>        | Us     |

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Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 10 of 11)

| Family                  | Common name             | Genus species                        | Status |
|-------------------------|-------------------------|--------------------------------------|--------|
| Emberizidae (continued) |                         |                                      |        |
|                         | Western Tanager         | <i>Piranga ludoviciana</i>           | Um     |
|                         | Rose-breasted Grosbeak  | <i>Pheucticus ludovicianus</i>       | Am     |
|                         | Black-headed Grosbeak   | <i>Pheucticus melanocephalus</i>     | Rs     |
|                         | Lazuli Bunting          | <i>Passerina amoena</i>              | Rs     |
|                         | Rufous-sided Towhee     | <i>Pipilo erythrophthalmus</i>       | Uw     |
|                         | American Tree Sparrow   | <i>Spizella arborea</i>              | Rw     |
|                         | Chipping Sparrow        | <i>Spizella passerina</i>            | Rm     |
|                         | Brewer's Sparrow        | <i>Spizella breweri</i>              | Rr     |
|                         | Vesper Sparrow          | <i>Pooecetes gramineus</i>           | Rm     |
|                         | Lark Sparrow            | <i>Chondestes grammacus</i>          | Rs     |
|                         | Sage Sparrow            | <i>Amphispiza belli</i>              | Us     |
|                         | Savannah Sparrow        | <i>Passerculus sandwichensis</i>     | Us     |
|                         | Grasshopper Sparrow     | <i>Ammodramus savannarum</i>         | Us     |
|                         | Fox Sparrow             | <i>Passerella iliaca</i>             | Rm     |
|                         | Song Sparrow            | <i>Melospiza melodia</i>             | Ur     |
|                         | Lincoln's Sparrow       | <i>Melospiza lincolni</i>            | Rm     |
|                         | Swamp Sparrow           | <i>Melospiza georgiana</i>           | Am     |
|                         | Golden-crowned Sparrow  | <i>Zonotrichia atricapilla</i>       | Rm     |
|                         | White-crowned Sparrow   | <i>Zonotrichia leucophrys</i>        | Cr     |
|                         | Harris' sparrow         | <i>Zonotrichia querula</i>           | Rw     |
|                         | Dark-eyed Junco         | <i>Junco hyemalis</i>                | Cw     |
|                         | Lapland Longspur        | <i>Calcarius lapponicus</i>          | Rw     |
|                         | Bobolink                | <i>Dolichonyx oryzivorus</i>         | Am     |
|                         | Red-winged Blackbird    | <i>Agelaius phoeniceus</i>           | Cr     |
|                         | Western Meadowlark      | <i>Sturnella neglecta</i>            | Cr     |
|                         | Yellow-headed Blackbird | <i>Xanthocephalus xanthocephalus</i> | Us     |

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Table 1. Status of Birds of the Hanford Site, Washington.  
(sheet 11 of 11)

| Family                  | Common name          | Genus species                     | Status |
|-------------------------|----------------------|-----------------------------------|--------|
| Emberizidae (continued) |                      |                                   |        |
|                         | Rusty Blackbird      | <i>Euphagus carolinus</i>         | Aw     |
|                         | Brewer's Blackbird   | <i>Euphagus cyanocephalus</i>     | Ur     |
|                         | Brown-headed Cowbird | <i>Molothrus ater</i>             | Ur     |
|                         | Northern Oriole      | <i>Icterus galbula</i>            | Us     |
| Fringillidae            |                      |                                   |        |
|                         | Rosy Finch           | <i>Leucosticte arctoa</i>         | Rw     |
|                         | Purple Finch         | <i>Carpodacus purpureus</i>       | Aw     |
|                         | House Finch          | <i>Carpodacus mexicanus</i>       | Cr     |
|                         | Common Redpoll       | <i>Carduelis flammea</i>          | Aw     |
|                         | Pine Siskin          | <i>Carduelis pinus</i>            | Rw     |
|                         | Lesser Goldfinch     | <i>Carduelis psaltria</i>         | Am     |
|                         | American Goldfinch   | <i>Carduelis tristis</i>          | Ur     |
|                         | Evening Grosbeak     | <i>Coccothraustes vespertinus</i> | Uw     |
| Passeridae              |                      |                                   |        |
|                         | House Sparrow        | <i>Passer domesticus</i>          | Cr     |

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Table 2. Observation Dates and Locations of Birds Listed as Accidentals at the Hanford Site. (sheet 1 of 2)

| Species                                | Date                | Location                     | Personnel               |
|--|---------------------|------------------------------|-------------------------|
| American Redstart <sup>1</sup>         | Sept. 15, 1983      | Columbia River               | WHC <sup>2</sup>        |
| Arctic Tern <sup>3</sup>               | May 21, 1957        | Columbia River               | Hanson, 1958            |
| Band-tailed Pigeon <sup>3</sup>        | Spring 1976         | Snively Canyon               | PNL Report              |
| Barred Owl                             | Feb. 15, 1978       | FFTF                         | WHC                     |
| Black-chinned Hummingbird <sup>1</sup> | May 11, 1983        | 200 East                     | WHC                     |
| Black Phoebe                           | Sept. 4, 1962       | Snively Canyon               | Rickard, 1964           |
| Blackbellied Plover                    | Oct. 17, 1984       | B-Pond                       | WHC                     |
| Bobolink <sup>1</sup>                  | Oct 21, 1990        | 4 mi E Yakima Barricade      | WHC                     |
|  | May 1980            | Gable Mtn. Pond              | WHC                     |
| Brant <sup>1</sup>                     | Nov. 27, 1957       | Columbia River               | Hanson, 1958            |
| Common Poorwill                        | Oct. 11, 1983       | Columbia River               | WHC                     |
| Common Redpoll <sup>1</sup>            | Jan. 9, 1986        | A-29 Ditch                   | WHC                     |
| Flammulated Owl                        | March 4, 1972       | Bobcat Canyon                | Fitzner et al., 1981    |
| Gray Catbird <sup>1</sup>              | May 1978            | A-29 Ditch                   | WHC                     |
| Gyr Falcon                             | Mar. 3, 1985        | 200 East                     | WHC                     |
|  | Jan. 2-16, 1986     | Gable Butte                  | WHC                     |
| Herring Gull                           | Jan. 13, 1981       | Columbia River               | WHC                     |
|  | Oct. 24, 1983       | B-Pond                       | WHC                     |
| Hutton's Vireo                         | Mar. 20, 1972       | U-Pond                       | Fitzner & Rickard, 1975 |
|  | May 13, 1983        | Hanford Townsite             | WHC                     |
| Lesser Goldfinch                       | Feb. 2, 1981        | Hanford Townsite             | WHC                     |
| Long-tailed Jaeger                     | Dec. 12, 1982       | 200 West                     | WHC                     |
|  | June 12, 1969       | Columbia River               | Hanson, 1970            |
| Marbled Godwit <sup>1</sup>            | April 18, 1983      | West Lake                    | WHC                     |
| Mountain Plover <sup>1</sup>           | Spring 1982 or 1983 | Columbia River               | Books, 1985             |
| Northern Bobwhite <sup>1</sup>         | June 29, 1983       | 10 mi. East Yakima Barricade | WHC                     |

Table 2. Observation Dates and Locations of Birds Listed as Accidentals at the Hanford Site. (sheet 2 of 2)

| Species                             | Date                           | Location                         | Personnel                      |
|-------------------------------------|--------------------------------|----------------------------------|--------------------------------|
| Northern Mockingbird <sup>3</sup>   | June 1971                      | U-Pond                           | Fitzner & Price, 1973          |
| Northern Saw-whet Owl               | July 17, 1978<br>Oct. 2, 1977  | Snively Canyon<br>McGee Ranch    | Fitzner et al., 1981<br>WHC    |
| Palm Warbler                        | Sept. 14, 1983<br>Oct. 4, 1983 | Columbia River<br>McGee Ranch    | WHC<br>WHC                     |
| Parasitic Jaeger <sup>3</sup>       | June 30, 1969                  | Columbia River                   | Hanson, 1970                   |
| Peregrine Falcon                    | Unknown<br>Mar. 3, 1983        | Unknown<br>Columbia River        | Fitzner, et al., 1981<br>WHC   |
| Philadelphia Vireo                  | May 12, 16-17, 1983            | McGee Ranch<br>A-29 Ditch        | WHC                            |
| Red-breasted Merganser              | Jan. 7, 1985<br>Feb. 20, 1985  | B-Pond<br>B-Pond                 | WHC<br>WHC                     |
| Red Phalarope <sup>1</sup>          | Aug. 15, 1989                  | West Lake                        | WHC                            |
| Rose-breasted Grosbeak <sup>1</sup> | May 16, 1986                   | A-29 Ditch                       | WHC                            |
| Rusty Blackbird <sup>1</sup>        | March 23, 1986                 | A-29 Ditch                       | WHC                            |
| Scrub Jay <sup>1</sup>              | August 1990                    | Yakima Barricade                 | WHC                            |
| Sharp-tailed Sandpiper              | July 7, 1983                   | West Lake                        | WHC                            |
| Swamp Sparrow                       | Feb 17, 1972<br>May 22, 1981   | U-Pond<br>Redox Pond             | Fitzner & Rickard, 1975<br>WHC |
| Tennessee Warbler                   | May 17, 1983                   | McGee Ranch                      | WHC                            |
| Trumpeter Swan                      | Oct. 20, 1981<br>Dec. 7, 1984  | Columbia River<br>Columbia River | WHC<br>WHC                     |
| Turkey Vulture                      | Spring 1978                    | Rattlesnake Mtn.                 | Fitzner et al., 1981           |
| Western Screech Owl <sup>1</sup>    | May 1981                       | Wye Barricade                    | WHC                            |

<sup>1</sup>Single observer sighting.

<sup>2</sup>Westinghouse biologists or Audubon Society member observations.

<sup>3</sup>Not enough information given in previously published documents to indicate number of observers.

FFTF = Fast Flux Test Facility

PNL = Pacific Northwest Laboratory

WHC = Westinghouse Hanford Company.

Table 3. Hypothetical List of Birds Observed  
Within 50 Miles of the Hanford Site.

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|                        |                             |
|------------------------|-----------------------------|
| Black Scoter           | Black Tern                  |
| Black-necked Stilt     | Black-throated Gray Warbler |
| Blackburnian Warbler   | Blackpoll Warbler           |
| Blue Jay               | Brown Creeper               |
| Cassin's Finch         | Cattle Egret                |
| Green-backed Heron     | Harlequin Duck              |
| Hudsonian Godwit       | LeConte's Sparrow           |
| Lesser Golden Plover   | Mew Gull                    |
| Mountain Chickadee     | Northern Parula Warbler     |
| Northern Waterthrush   | Ovenbird                    |
| Pomarine Jaeger        | Prothonotary Warbler        |
| Pygmy Nuthatch         | Red Crossbill               |
| Red-necked Grebe       | Red Knot                    |
| Red-throated Loon      | Red-naped Sapsucker         |
| Ross' Goose            | Ruddy Turnstone             |
| Short-billed Dowitcher | Snowy Plover                |
| Surf Scoter            | Thayer's Gull               |
| Three-toed Woodpecker  | Vaux' Swift                 |
| Whimbrel               | White-breasted Nuthatch     |
| White-faced Ibis       | White-winged Crossbill      |
| White-winged Scoter    | Willet                      |
| Wood Duck              | Yellow-billed Cuckoo        |

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