

Annotated Checklist of Idaho Vertebrates

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A checklist for 571 vertebrate species in Idaho was prepared for use as a reference tool in the identification of nongame species. For 68 fishes, 15 amphibians, 22 reptiles, and 109 mammals, the checklist includes information on taxonomy, habitat, and distribution. For the 357 bird species that have been recorded in Idaho, information in the checklist includes taxonomy, habitat, and distributional status (breeding, migratory, wintering, and rare birds). Although the vast majority of vertebrate species in Idaho are native to the state, this checklist also includes information on introduced species.

Introduction

With the recent advent of nongame programs in many states, including Idaho, there is a growing public interest in wild animals, both rare and common, that are not usually associated with sport hunting (Jackson 1982). Thirty-one states now have nongame programs funded by income tax checkoffs, and at least 17 other states have informational materials and planning documents on nongame programs (Marshall 1984). One result of the expansion of wildlife management to encompass nongame species is that many biologists trained in traditional wildlife management have found themselves ill-prepared for nongame wildlife studies (Finley 1980). The major purpose of this annotated checklist is to provide wildlife biologists, academicians, and wildlife students in Idaho with a reference tool for identifying nongame species in the state.

In North America, north of Mexico, there are approximately 1,500 species of native vertebrates (excluding fish) comprising about 460 amphibians and reptiles (Collins et al. 1982), 408 mammals (Jones et al. 1982), and 650 breeding birds (Robbins et al. 1983). In the United States and Canada, there are about 2,270 species of native and exotic (nonnative) fish species (Robins et al. 1980). The vast majority (about 90 percent) of North American vertebrates (fish excepted) are nongame species

(Bury et al. 1981), which generally refers to species that are not hunted for sport, although this definition varies from state to state.

In Idaho, there are approximately 68 species of native and introduced fish, 13 species of native amphibians, 22 species of native reptiles, 229 species of breeding birds, and 103 species of native mammals. The Idaho Fish and Game Commission defines nongame wildlife as all amphibians, reptiles, birds, and mammals not classified as game animals, game birds, predatory animals, or furbearing animals (Idaho Department of Fish and Game 1981). In total, approximately 280 species, or 76 percent, of the states' vertebrates (fish excepted) are classified as nongame species.

Scientific and common nomenclature used in this checklist were taken from the most widely accepted classifications for the five vertebrate classes. Care has been taken to use the most up-to-date taxonomy possible. Organization of the annotated checklist is by taxonomic classification, with the five classes of vertebrates appearing in separate tables. Within each table, species are organized by order, family, and genus. A general habitat description is provided for each species. For fish, amphibians, reptiles, and mammals, some general information on distribution, based upon the six Idaho Department of Fish and Game regions (see Fig. 1), is given for each species. When the distribution of a

species is generally confined to one location, this area is indicated in parentheses following the regional distribution numbers provided in each table.

Fish

Of the 68 fish species that occur in Idaho, 40 are native and 28 are introduced species (Table 1). An additional five species that were introduced to the state, but are now presumed extinct in Idaho, are also included in the checklist. The recognized species are classified in 34 genera, representing 13 families of fish. One species of fish, the red-band trout (Salmo sp.), remains undescribed. In addition, five subspecies of cutthroat trout (Salmo clarki) are recognized in this checklist. Taxonomy



Fig. 1. Boundaries of the six administrative regions of the Idaho Department of Fish and Game.

for the fish species follows that of the American Fisheries Society (Robins et al. 1980). Simpson and Wallace (1982) provided information on the habitat and distribution of Idaho fishes. Their book on the fishes of Idaho gives additional information on physical descriptions (including drawings), life history, and distribution. In addition, some habitat descriptions were taken from Lee et al. (1980).

Amphibians and Reptiles

Fifteen species of amphibians, representing 10 genera and eight families, occur in Idaho (Table 2). All but two of these species are native to the state. There are 22 species of reptiles that occur in Idaho (Table 3), representing 19 genera and eight families; all reptilian species are native to the state. Taxonomy for amphibians and reptiles follows that of the Society for the Study of Amphibians and Reptiles (Collins et al. 1982). Information on habitat and distribution for amphibians and reptiles was taken primarily from Nussbaum et al. (1983). Their book on the amphibians and reptiles of the Pacific Northwest provides additional information on physical descriptions (including photographs). habitat, life history, and distribution. Linder and Fichter's (1977) booklet on the amphibians and reptiles of Idaho furnishes similar information. Lastly, two field guides, complete with color plates on amphibians and reptiles of North America, are available (Smith 1978; Stebbins 1985).

Birds

A total of 357 bird species has been recorded in Idaho. These species represent 48 families and 95 genera of birds. Only 12 species are not native to Idaho. Table 4 provides a list of these species, a general habitat description, and some information on the status of each species in the state. Taxonomy, habitat description, and distributional status in Idaho follows that of the American Ornithologists' Union Check-list of North American Birds (1983). Secondarily, some habitat descriptions were taken from the state's two major bird works, Burleigh (1972) and Larrison et al. (1967).

Two hundred twenty-nine of Idaho's bird species are thought to nest here. These species are indicated by a B in the status column of Table 4. Approximately 130 species winter in Idaho; these are indicated by a W in the status column. For some

Table 1. Fish species in Idaho, their habitats, and distribution. Numbers given in Distribution column refer to Idaho Department of Fish and Game Regions (see Figure 1).

Species	Habitat	Distribution
Petromyzontiformes		
Petromyzontidae (lampreys):		
Lampetra tridentata (Pacific lamprey)	large rivers, spawn in smaller tributaries	2,3,6
Acipensiformes		
Acipenseridae (sturgeons):		
Acipenser transmontanus (white sturgeon)	large, cool rivers	1,2,3,
Clupeiformes		
Clupeidae (herrings):		
Alosa sapidissima (American shad)1		2 (Snake River at Lewiston)
Salmoniformes		
Salmonidae (trout):		
Coregonus clupeiformes (lake whitefish)1	deep, clear, cold lakes	1 (Pend Oreille Lake)
Oncorhyncus keta (chum salmon) ¹ ²		5 (Bear Lake)
Oncorhyncus kisutch (coho salmon) ³	large, cool rivers	3,5,6
Oncorhyncus nerka (sockeye, kokanee salmon*)	large rivers and lakes	1,2,3,4,6
Oncorhyncus tshawytscha (chinook salmon)	large rivers	1,2,3,4,5,6
Prosopium abyssicola (Bear Lake whitefish)	deep, cold lakes	5 (Bear Lake)
Prosopium coulteri (pygmy whitefish)	deep, cold lakes	1
Prosopium gemmiferum (Bonneville cisco)	deep, cold lakes	5 (Bear Lake)
Prosopium spilonotus (Bonneville whitefish)	deep, cold lakes	5 (Bear Lake)
Prosopium williamsoni (mountain whitefish)	mountain streams	1,2,3,4,5,6
Salmo aguabonita (golden trout) ¹	mountain lakes	2,3,5,6
Salmo clarki (cutthroat trout)	clear, cold lakes & streams	1,2,3,4,5,6
Salmo clarki utah (Bonneville cutthroat trout)	clear, cold lakes & streams	5 (Bear River drainage)
Salmo clarki lewisi (westslope cutthroat trout)		1,2,3,6
Salmo clarki ssp. (Bear Lake cutthroat trout)		5 (Bear Lake)
Salmo clarki ssp. (Snake River fine-spotted		5 (Bedi Lake)
cutthroat trout)		6 (S. Fork Snake River)
Salmo clarki bouverei (Yellowstone cutthroat trout)		6
Salmo gairdneri (rainbow trout, steelhead) ⁵	labor recompsive etreams	1,2,3,4,5,6
Salmo salar (Atlantic salmon) ¹ ²	lakes, reservoirs, streams	
Salmo trutta (brown trout) ¹	large rivers and streams	3,6
Salmo sp. (redband trout)	desert streams	1,3,4,5,6
Salvelinus alpinus (arctic char) ¹ ²	lakes	2,3,4
Salvelinus fontinalis (brook trout) ¹	mountain lakes	3,6 (Sawtooth Mt. lakes)
Salvelinus confluentus (bull trout)	mountain streams & lakes	1,2,3,6 1,2,3,6
Salvelinus namaycush (lake trout) ¹		
Thymallus arcticus (arctic grayling) ¹	deep, cold lakes clear, cold lakes	1,3,5,6
	clear, cold lakes	1,2,3,4,6
Osmeridae (smelts):		26.6
Osmerus mordex (rainbow smelt) ¹ ²	mountain lakes	3,6 (Sawtooth Mt. lakes)
Esocidae (pike):	The second second	
Esox lucius (northern pike)1	weedy area of lakes, rivers	1
Cypriniformes		
Cyprinidae (carps and minnows):		
Acrocheilus alutaceus (chiselmouth)	slow-moving streams, lakes	2,3,4,6
Carassius auratus (goldfish) ¹	ponds	2,3
Couesius plumbeus (lake chub)	small streams	1(Kootenai River drainage)
Cyprinus carpio (carp) ¹	warm, shallow streams & lakes	2,3,4,5
Gila atraria (Utah chub) Gila bicolor (tui chub)	lakes, ponds, reservoirs slow-moving streams or lakes	4,5,6 3 (Lucky Peak Reservoir & Boise

Introduced species.
 Probably extinct in Idaho.

³ Native species introduced to streams or lakes outside its range.

⁴ Non-anadromous.

⁵ Introduced above Shoshone Falls on Snake River.

Table 1. (concluded)

Species	Habitat	Distribution
Gila copei (leatherside chub)	clear, cool streams	4,5
Mylocheilus caurinus (peamouth)	weedy, slow-moving streams	1,2,3
Pimephales promelas (fathead minnow) ¹	weedy, slow-moving streams, shallow lakes	6 (Quayle Lake, Jefferson Co.)
Ptychocheilus oregonensis (northern squawfish)	lakes or slow-moving streams	1,2,3,6
Rhinichthys cataractae (longnose dace)	stream riffles	1,2,3,4,5,6
Rhinichthys falcatus (leopard dace)	slow-moving currents	3
Rhinichthys osculus (speckled dace)	shallow, cool waters	1,2,3,4,5,6
Richardsonius balteatus (redside shiner)	slow-moving water in streams or lakes	1,2,3,4,5,6
Tinca tinca (tench)1	lakes, backwater of streams	1,2
Catostomidae (suckers):		
Catostomus ardens (Utah sucker)	cold or warm lakes & streams	5,6
Catostomus catostomus (longnose sucker)	clear, cold water	1
Catostomus columbianus (bridgelip sucker)	cold, fast streams	1,2,3,4,6
Catostomus discobolus (bluehead sucker)	cold or warm streams	4,5,6
Catostomus macrocheilus (largescale sucker)	lakes, large rivers	1,2,3,4,6
Catostomus platyrhynchus (mountain sucker)	clear stream with sand bottom	3,5,6
Siluriformes		
Ictaluridae (bullhead catfishes):		
Ictalurus melas (black bullhead)1	shallow lakes with weeds	1,3,4
Ictalurus nebulosus (brown bullhead)1	shallow lakes or slackwater of streams	1,2,3,5,6
Ictalurus punctatus (channel catfish)1	large rivers, shallow reservoirs	2,3,4
Noturus gyrinus (tadpole madtom)1	shallow lakes, slow-moving streams	3
Pylodictis olivaris (flathead catfish) ¹	large rivers, lakes, reservoirs	2,3
Percopsiformes		
Percopsidae (trout-perches):		
Percopsis transmontana (sand roller)2	slow-moving streams	2
Gadiformes		
Gadidae (codfishes):		
Lota lota (burbot)	cold lakes, large rivers	1 (Kootenai River)
Atheriniformes Poeciliidae (livebearers):		
Gambusia affinis (mosquitofish)1	vegetated ponds	2,3,4
Poecilia reticulata (guppy) ¹	warm springs	6 (Little Lost River)
Perciformes Centrarchidae (sunfishes):		
Lepomis cyanellus (green sunfish)1	lakes, ponds, backwater of streams	5
Lepomis gibbosus (pumpkinseed)1	fine gravel in streams	1,2,3,4
Lepomis gulosus (warmouth)1	weed beds of lakes	3
Lepomis macrochirus (bluegill) ¹	warm lakes	2,3,4,5
Micropterus dolomieui (smallmouth bass)1	cool streams with riffles	2,3,4
Micropterus salmoides (largemouth bass)1	clear water with vegetation	1,2,3,4,5
Pomoxis nigromaculatus (black crappie)1	warm water with vegetation	1,2,3,4,5,6
Cottidae (sculpins):		
Cottus bairdi (mottled sculpin)	streams with rubble bottoms	2,3,4,5,6
Cottus beldingi (Piute sculpin)	clear, cold streams & lakes	2,4,5,6
Cottus cognatus (slimy sculpin)	streams with rubble bottoms	1,3
Cottus confusus (shorthead sculpin)	cool, clear water	1,2,3,4,6
Cottus extensus (Bear Lake sculpin)	cold, large lakes	5 (Bear Lake)
Cottus greenei (Shoshone sculpin)	cool spring systems	4 (Snake River-Hagerman)
Cottus leiopomus (Wood River sculpin)	clear, cool streams	4 (Wood River drainage)
Cottus rhotheus (torrent sculpin)	cool, clear riffles	1,2,3,6
Percidae (perches):	oot, dear times	1,2,3,0
Perca flavescens (yellow perch) ¹	cold clear lakes with went "	12456
Stizostedion vitreum (walleye) ¹	cold, clear lakes with vegetation	1,3,4,5,6
omedical chreatif (walleye)	large, deep streams & lakes	4,5,6

¹ Introduced species.

² Probably extinct in Idaho.

Table 2. Amphibian species in Idaho, their habitats, and distribution. Numbers given in Distribution column refer to Idaho Department of Fish and Game Regions (see Figure 1).

Species	Habitat	Distribution
Caudata (salamanders)		
Ambystomatidae (mole salamanders):		
Ambystoma macrodactylum (long-toed salamander)	sagebrush steppe, woodlands, forests, meadows	1,2,3,4
Ambystoma tigrinum (tiger salamander)	sagebrush steppe	1,2,5,6
Dicamptodon ensatus (Pacific giant salamander)	moist, coniferous forests	1,2,3
Plethodontidae (lungless salamanders)		
Plethodon vandykei (Van Dyke's salamander)	moist talus	1,2
Salamandridae (newts):		
Taricha granulosa (roughskin newt)1	ponds	2 (near Moscow)
Anura (frogs, toads)		
Bufonidae (toads):		
Bufo boreas (western toad)	all habitats	1,2,3,4,5,6
Bufo woodhousei (Woodhouse's toad)	all habitats near water	3 (along Snake River and Boise River below Boise)
Hylidae (treefrogs):		
Hyla regilla (Pacific treefrog)	all habitats near water	1,2,3,4
Pseudacris triseriata (striped chorus frog)	moist grasslands, wooded areas, marshes	3,4,5,6
Leiopelmatidae (bell toads):		
Ascaphus truei (tailed frog)	forested streams	1,2,3,6
Pelobatidae (spadefoot toads):		
Scaphiopus intermontanus (Great Basin spadefoot)	sagebrush steppe near water	3,4,5,6 (along Snake River and Boise River below Boise)
Ranidae (true frogs):		
Rana catesbeiana (bullfrog) ²	aquatic habitats	1,2,3
Rana pipiens (northern leopard frog)	marshes, wet meadows, grassy woodlands	1,3,4,5,6
Rana pretiosa (spotted frog)	marshes near ponds or lakes	1,2,3,4,6
Rana sylvatica (wood frog)	marshes near ponds or lakes	1

¹ Probably introduced species.

bird species, some individuals winter in Idaho, whereas others migrate through or out of the state. For the purposes of this checklist, a species is considered to winter in Idaho if any individuals of the species remain in the state during the winter mon-Twenty-two species are regular migrants through the state, but do not breed or winter in Idaho. These species are designated by a M in the status column. Two other categories listed in the status column are rare and accidental (A). Rare birds are those species for which there are 3-25 known records in Idaho (Taylor and Trost, in press). We defined an accidental species as any bird with one or two known records of occurrence in Idaho. By these definitions, 67 species can be classified as rare and 38 as accidental. These accidental and rare species may occasionally migrate through or winter in Idaho. However, we did not assign a wintering or migratory status to these species.

No distributional information on Idaho birds is provided in this annotated checklist. This distributional information is best obtained from field guides and regional checklists. A list of these field guides and checklists for Idaho is furnished as references under literature cited. In addition to these checklists, all U.S. Fish and Wildlife Service National Wildlife Refuges in Idaho, as well as many state parks, maintain checklists.

Mammals

All but six of Idaho's 109 mammalian species are native to the state (Table 5). These species represent 23 families and 62 genera of mammals. Tax-

² Introduced species.

Table 3. Reptilian species in Idaho, their habitats, and distribution. Numbers given in Distribution column refer to Idaho Department of Fish and Game Regions (see Figure 1).

Species	Habitat	Distribution
Testudines (turtles)		
Emydidae (water and box turtles):		
Chrysemys picta (painted turtle)	marshes, ponds, slow streams	1,2
Squamata (lizards, snakes)	The second secon	
Anguidae (anguids):		
Elgaria coerulea (northern alligator lizard)	humid coniferous forest	1,2
Iguanidae (iguanids):		
Crotaphytus bicinctores (Mojave black-collared lizard)	rocky, dry regions in deserts	3,5,6
Gambelia wislizenii (longnose leopard lizard)	sandy, shrub steppe	3,4,5,6
Phrynosoma douglassii (short-horned lizard)	sagebrush steppe, juniper woodlands	3,4,5,6
Phrynosoma platyrhinos (desert horned lizard)	shrub steppe	3,4 (along Snake River)
Sceloporus graciosus (sagebrush lizard)	sagebrush steppe, juniper woodlands	3,4,5,6
Sceloporus occidentalis (western fence lizard)	rocky canyons, talus slopes in deserts	2,3,4
Uta stansburiana (side-blotched lizard)	sagebrush steppe, juniper woodlands	3,4 (along Snake River)
Scincidae (skinks):	angernan siepper jumper noonands	o, r (along offaire ritter)
Eumeces skiltonianus (western skink)	moist, rocky areas in deserts,	1,2,3,4,5,6
	woodlands & forests	1,5,0,1,0,0
Teiidae (whiptails):	7	
Cnemidophorus tigris (western whiptail)	shrub steppe	3,4 (along Snake River)
Boidae (boas):	and steppe	o, I (along onake Hiver)
Charina bottae (rubber boa)	deserts, woodlands, forests	1,2,3,4,5
Colubridae (colubrids):	deserts, woodlands, forests	1,2,0,4,0
Coluber constrictor (racer)	meadows, sagebrush steppe,	1,2,3,4,5,6
Colubbi Collonicio, (Ideel)	forest edge	1,2,3,4,3,0
Diadophis punctatus (ringneck snake)	woodlands, rocky canyons	2,3,5
Hypsiglena torquata (night snake)	dry, rocky regions	3,4,5
Masticophis taeniatus (striped whipsnake)	shrub steppe, rocky canyons	3,4,5 (along Snake River)
Pituophis melanoleucus (gopher snake)	sagebrush steppe, dry coniferous	2,3,4,5,6
Thurst metanoleacus (gopher shake)	forests	2,3,4,3,0
Rhinocheilus lecontei (longnose snake)	rocky canyons in deserts	3 (along Snake River)
Sonora semiannulata (western ground snake)	sandy shrub steppe	3 (along Snake River)
Thamnophis elegans (western terrestrial	near water	1,2,3,4,5,6
garter snake)	near water	1,2,5,4,5,0
Thamnophis sirtalis (common garter snake)	near water	1,2,3,4,5,6
Viperidae (pit vipers):	near water	1,2,5,4,5,6
Crotalus viridus (western rattlesnake)	shrub steppe, woodlands	2,3,4,5,6

onomy for mammals follows that of the Museum of Texas Tech University (Jones et al. 1982). Information on habitats for the Idaho mammals was taken primarily from Larrison and Johnson (1981). Their book on Idaho mammals contains additional information on species descriptions, range, and life history. Hall (1981) was the primary source for distributional data. Additional information on habitats for some mammals was obtained from Chapman and Feldhamer (1982). Although a field guide for the mammals of North America does exist (Burt and Grossenheider 1976), the taxonomy and distribution maps in it are out-of-date. The book's

color plates of the majority of North American mammals are excellent.

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Table 4. Bird species of Idaho, their habitats, and status. Status refers to whether a species breeds in Idaho (B), winters in Idaho (W), is an accidental (A) or Rare species in the state, or is a regular migrant (M) through the state. See text for more detailed explanation of the status categories.

Species	Habitat	Status
Gaviiformes (loons)		
Gaviidae (loons):		
Gavia stellata (red-throated loon)	lakes, rivers	Rare
Gavia pacifica (Pacific loon)	lakes, rivers	Rare
Gavia immer (common loon)	lakes	В
Podicipediformes (grebes)		
Podicipedidae (grebes):		
Podilymbus podiceps (pied-billed grebe)	lakes, marshes, slow rivers	B, W
Podiceps auritus (horned grebe)	lakes, marshes, slow rivers	B, W
Podiceps grisegena (red-necked grebe)	lakes, rivers	В
Podiceps nigricollis (eared grebe)	lakes, marshes	В
Aechmophorus occidentalis (western grebe)	lakes, marshes	В
Aechmophorus clarkii (Clark's grebe)	lakes, marshes	В
Pelecaniformes		
Pelecanidae (pelicans):		
Pelecanus erythrorhynchos (American white pelican)	lakes, rivers	В
Pelecanus occidentalis (brown pelican)	rivers	Rare
Phalacrocoracidae (cormorants):		
Phalacrocorax auritus (double-crested cormorant)	lakes, rivers	В
Ciconiiformes		
Ardeidae (bitterns, herons):		
Botaurus lentiginosus (American bittern)	marshes	В
Ixobrychus exilis (least bittern)	marshes	Rare
Ardea herodias (great blue heron)	marshes, lakes, rivers	B, W
Casmerodius albus (great egret)	marshes	B, Rar
Egretta thula (snowy egret)	marshes, lakes	В
Bubulcus ibis (cattle egret)	marshes, wet pastures	В
Butorides striatus (green-backed heron)	marshes, lakes	Rare
Nycticorax nycticorax (black-crowned night-heron)	marshes, lakes, trees near water	В
Threskiornithidae (ibises, spoonbills):		
Eudocimus albus (white ibis)	rivers	Α
Plegadis chihi (white-faced ibis)	marshes, lakes, rivers	В
Ciconiidae (storks):		
Mycteria americana (wood stork)	wet meadows	Α
Anseriformes		
Anatidae (swans, geese, ducks):		
Cygnus columbianus (tundra swan)	lakes, slow streams, marshes	M
Cygnus buccinator (trumpeter swan)	lakes, marshes	B, W
Anser albifrons (greater white-fronted goose)	marshes, pastures	M
Chen caerulescens (snow goose)	marshes, pastures	M
Chen rossii (Ross' goose)	marshes, pastures	Rare
Chen canagica (emperor goose)	marshes	Α
Branta bernicla (brant)	marshes	Rare
Branta canadensis (Canada goose)	marshes, meadows, islands, rivers	B, W
Aix sponsa (wood duck)	wooded swamps, marshes, ponds, streams	B, W
Anas crecca (green-winged teal)	lakes, marshes, ponds	B, W
Anas rubripes (American black duck)	marshes, swamps, lakes, ponds	Α
Anas platyrhynchos (mallard)	lakes, marshes, ponds	B, W
Anas acuta (northern pintail)	lakes, marshes, ponds, rivers	B, W
Anas discors (blue-winged teal)	marshes, ponds, lakes, slow streams	В, п
Anas cyanoptera (cinnamon teal)	shallow lakes, ponds, marshes	В
Anas clypeata (northern shoveler)	marshes	В
Anas strepera (gadwall)	marshes, grassy areas	B, W

Table 4. (continued)

Species	Habitat	Status
Anas penelope (Eurasian wigeon)	marshes	Rare
Anas americana (American wigeon)	large marshes, lakes	B, W
Aythya valisineria (canvasback)	marshes, ponds, lakes, rivers	B, W
Aythya americana (redhead)	marshes, lakes, rivers	B, W
Aythya collaris (ring-necked duck)	marshes, lakes, rivers, swamps	B, W
Aythya marila (greater scaup)	large lakes, rivers	Rare
Aythya affinis (lesser scaup)	lakes, rivers, marshes, ponds	B, W
Histrionicus histrionicus (harlequin duck)	mountain streams in forests	B, Rare
Clangula hyemalis (oldsquaw)	shallow lakes	Rare
Melanitta perspicillata (surf scoter)	ponds, lakes, rivers	Rare
Melanitta fusca (white-winged scoter)	ponds, lakes, rivers	Rare
Bucephala clangula (common goldeneye)	ponds, lakes, rivers	B, W
Bucephala islandica (Barrow's goldeneye)	ponds, lakes, rivers	B, W
Bucephala albeola (bufflehead)	ponds, lakes, rivers	B, W
Lophodytes cucullatus (hooded merganser)	streams, lakes, swamps, marshes	B, W
Mergus merganser (common merganser)	lakes, rivers	B, W
Mergus serrator (red-breasted merganser)	rivers, ponds, lakes	M
Oxyura jamaicensis (ruddy duck)	marshes, lakes	B, W
Falconiformes Cathartidae (American vultures):		Δ, W
Cathartes aura (turkey vulture) Accipitridae (kites, eagles, hawks):	open forests, shrub steppe	В
Pandion haliaetus (osprey)	rivers, lakes	В
Elanus caeruleus (black-shouldered kite)	open woodlands, marshes	Rare
Haliaeetus leucocephalus (bald eagle)	rivers, large lakes	B, W
Circus cyaneus (northern harrier)	grasslands, shrub steppe, marshes	B, W
Accipiter striatus (sharp-shinned hawk)	forests, open woodlands	B, W
Accipiter cooperii (Cooper's hawk)	forests, open woodlands	B, W
Accipiter gentilis (northern goshawk)	forests, forest edge, open woodlands	B, W
Buteo platypterus (broad-winged hawk)	mixed forests	Rare
Buteo swainsoni (Swainson's hawk)	farm lands with scattered trees, grasslands	В
Buteo jamaicensis (red-tailed hawk)	open woodlands, shrub steppe	B, W
Buteo regalis (ferruginous hawk)	shrub steppe, grasslands	B, W
Buteo lagopus (rough-legged hawk)	grasslands, farm lands	W
Aquila chrysaetos (golden eagle)	shrub steppe, open coniferous forests	B. W
Falconidae (falcons):	sinus steppe, open connerous forests	D. W
Falco sparverius (American kestrel)	farm lands, urban areas, shrub steppe	B, W
Falco columbarius (merlin)	grasslands with scattered trees	B, W
Falco peregrinus (peregrine falcon)	steppe to forests with cliffs	B, W
Falco rusticolus (gyrfalcon)	grasslands, shrub steppe	Rare
Falco mexicanus (prairie falcon) Galliformes	steppe to forests with cliffs	B, W
Phasianidae (partridge, grouse, turkeys, quail):		
Perdix perdix (gray partridge) ¹	farm lands with shrubs	B, W
Alectoris chukar (chukar)	rocky hillsides, mountain slopes	B, W
Phasianus colchicus (ring-necked pheasant)1	shrub steppe, grasslands, cultivated lands	B, W
Dendragapus canadensis (spruce grouse)	dense coniferous forests	B, W
Dendragapus obscurus (blue grouse) Lagopus leucurus (white-tailed ptarmigan)	open coniferous forests, shrub steppe alpine tundra	B, W Rare
Bonasa umbellus (ruffed grouse)	dense or open coniferous & deciduous forests,	B, W
Centrocercus urophasianus (sage grouse)	riparian areas sagebrush steppe	
Tympanuchus phasianellus (sharp-tailed grouse)	Control of the Contro	B, W
Meleagris gallopavo (wild turkey) ¹	shrub steppe & grasslands with scattered trees	B, W
The state of the s	open woodlands	B, W
Collinguage gambalii (Comballa g	grasslands, farm lands	B, W
Callipepla gambelii (Gambel's quail) ¹	shrub steppe	Rare
Callipepla californica (California quail)¹	shrub steppe, grasslands, cultivated lands	B, W

¹ Introduced species.

Table 4. (continued)

Species	Habitat	Status
Oreortyx pictus (mountain quail)1	shrub mountainsides, coniferous forests, forest edge	B, W
Gruiformes		
Rallidae (rails, gallinules, coots):		
Coturnicops noveboracensis (yellow rail)	marshes, wet meadows	Α
Rallus limicola (Virginia rail)	marshes	B, W
Porzana carolina (sora)	marshes	B, W
Gallinula chloropus (common moorhen)	marshes	Α
Fulica americana (American coot)	lakes, ponds, marshes, rivers	B, W
Gruidae (cranes):		
Grus canadensis (sandhill crane)	grasslands, marshes, swamps	В
Grus americana (whooping crane)1	marshes	Rare
Charadriiformes		
Charadriidae (plovers):		
Pluvialis squatarola (black-bellied plover)	pond and lake shores	M
Pluvialis dominica (lesser golden-plover)	grasslands, pastures, mudflats	M
Charadrius alexandrinus (snowy plover)	mudflats; river, lake, & pond shores	Rare
Charadrius semipalmatus (semipalmated plover)	mudflats; marsh, lake & pond shores	M
Charadrius vociferus (killdeer)	meadows, pastures, mudflats	B, W
Charadrius montanus (mountain plover)	grasslands, plowed fields, sandy deserts	Rare
Haematopodidae (oystercatchers): Haematopus palliatus (American oystercatcher)	vivor or lake islands, name	
Recurvirostridae (stilts, avocets):	river or lake islands, ponds	Α
Himantopus mexicanus (black-necked stilt)	manches muddets shellowered	
Recurvirostra americana (American avocet)	marshes, mudflats, shallow ponds	В
Scolopacidae (sandpipers, phalaropes):	marshes, mudflats, ponds	В
Tringa melanoleuca (greater yellowlegs)	marshes, ponds, lakes, mudflats	M
Tringa flavipes (lesser yellowlegs)	marshes, ponds, lakes, mudflats	M
Tringa solitaria (solitary sandpiper)	ponds, stream edges, marshes	M
Catoptrophorus semipalmatus (willet)	marshes	В
Actitis macularia (spotted sandpiper)	streams, ponds, lakes	В
Bartramia longicauda (upland sandpiper)	grasslands, meadows, pastures	Rare
Numenius phaeopus (whimbrel)	marshes, mudflats, pastures	A
Numenius americanus (long-billed curlew)	pastures, grasslands	В
Limosa haemastica (Hudsonian godwit)	marshes, flooded fields, mudflats	A
Limosa fedoa (marbled godwit)	marshes	
Arenaria interpres (ruddy turnstone)	mudflats, lake shores	M Rare
Calidris canutus (red knot)	mudflats, lake shores	
Calidris alba (sanderling)	mudflats, lake & river shores	Rare
Calidris pusilla (semipalmated sandpiper)		M
Calidris mauri (western sandpiper)	mudflats, lake & pond shores mudflats, lake & pond shores	M
Calidris minutilla (least sandpiper)	mudflats, lake & pond shores	М
Calidris fuscicollis (white-rumped sandpiper)		M
Calidris bairdii (Baird's sandpiper)	grassy marshes, mudflats, pond & lake shores	A
Calidris melanotos (pectoral sandpiper)	grassy marshes, dry grass near water, mudflats	M
ACCOMPANIES MARKET MARK	wet meadows, mudflats, pond & lake shores	М
Calidris alpina (dunlin)	mudflats, marshes, pond & lake shores	Rare
Calidris himantopus (stilt sandpiper)	mudflats, marshes, pond & lake shores	Rare
Tryngites subruficollis (buff-breasted sandpiper)	dry grasslands, mudflats	A
Limnodromus griseus (short-billed dowitcher)	mudflats, lake & pond shores	Rare
Limnodromus scolopaceus (long-billed dowitcher)	marshes, lake & pond shores, mudflats	М
Gallinago gallinago (common snipe)	wet, grassy areas; bogs, swamps	B, W
Phalaropus tricolor (Wilson's phalarope)	marshes, wet meadows, mudflats	В
Phalaropus lobatus (red-necked phalarope)	ponds, lakes, marshes	M
Phalaropus fulicaria (red phalarope)	ponds, lakes, marshes	Α
_aridae (gulls, terns):	CC.	
Stercorarius pomarinus (pomarine jaeger)	lakes	A
Stercorarius parasiticus (parasitic jaeger)	lakes	Rare

¹ Introduced species.

Table 4. (continued)

Species	Habitat	Status
Stercorarius longicaudus (long-tailed jaeger)	lakes	Α
Larus pipixcan (Franklin's gull)	marshes	В
Larus philadelphia (Bonaparte's gull)	mudflats, marshes, rivers, lakes, ponds	M
Larus canus (mew gull)	large lakes & rivers	Rare
Larus delawarensis (ring-billed gull)	rivers, lakes, ponds, irrigated fields	B, W
Larus californicus (California gull)	rivers, lakes, ponds, irrigated fields	B, W
Larus argentatus (herring gull)	large lakes & rivers	W
Larus thayeri (Thayer's gull)	large lakes & rivers	Rare
Larus glaucoides (Iceland gull)	large lakes & rivers	Rare
Larus occidentalis (western gull)	large lakes	Α
Larus glaucescens (glaucous-winged gull)	large lakes & rivers	Rare
Larus hyperboreus (glaucous gull)	large lakes & rivers	Rare
Rissa tridactyla (black-legged kittiwake)	large lakes & rivers	Α
Xema sabini (Sabine's gull)	lakes, rivers	Rare
Sterna caspia (Caspian tern)	lakes, rivers	В
Sterna hirundo (common tern)	lakes, rivers, marshes	B, Rare
Sterna paradisaea (Arctic tern)	lakes, rivers	Α
Sterna forsteri (Forster's tern)	marshes, rivers	В
Sterna antillarum (least tern)	lakes, rivers	A
Chlidonias niger (black tern)	marshes, wet meadows, rivers	В
Alcidae (murrelets):		
Synthliboramphus antiquus (ancient murrelet)	large lakes & rivers	A
Columbiformes		
Columbidae (pigeons, doves):		
Columba livia (rock dove)1	farm lands, caves, cliffs, urban areas	B, W
Columba fasciata (band-tailed pigeon) Zenaida macroura (mourning dove)	coniferous forests open woodlands, farm lands with trees, shrub steppe	Rare
Cuculiformes	open woodiands, lann lands with trees, stituo steppe	B, W
Cuculidae (cuckoos):		
Coccyzus erythropthalmus (black-billed cuckoo)	forests, open woodlands	Rare
Coccyzus americanus (yellow-billed cuckoo)	open & riparian woodlands	B, Rare
Strigiformes		
Tytonidae (barn-owls):		
Tyto alba (common barn-owl)	shrub steppe, marshes, meadows, grasslands	B, W
Strigidae (typical owls):		
Otus flammeolus (flammulated owl)	montane forests	В
Otus kennicottii (western screech-owl)	riparian woodlands	B, W
Bubo virginianus (great horned owl)	open forests or woodlands, coniferous or	B, W
	deciduous, shrub steppe	
Nyctea scandiaca (snowy owl)	marshes, fields, pastures	W
Surnia ulula (northern hawk-owl)	open coniferous forests, forest edge	Rare
Glaucidium gnoma (northern pygmy-owl)	dense & open forests, coniferous or mixed	B, W
Athene cunicularia (burrowing owl)	shrub steppe, grasslands	В
Strix varia (barred owl)	dense woodlands & forests near streams, wooded marsh	B, W
Strix nebulosa (great gray owl)	dense coniferous & deciduous forests	B. W
Asio otus (long-eared owl)	meadows, shrub steppe, open woodlands	B, W
Asio flammeus (short-eared owl)	grasslands, meadows, marshes	B, W
Aegolius funereus (boreal owl)	dense coniferous or mixed forests	B, W
Aegolius acadicus (northern saw-whet owl)	dense conferous or mixed forests	
Caprimulgiformes	dense connerous of mixed forests	B, W
Caprimulgiormes Caprimulgidae (goatsuckers):		
	analysis that are a	-
Chordeiles minor (common nighthawk)	grasslands, shrub steppe, urban areas	В
Phalaenoptilus nuttallii (common poorwill)	shrub steppe, rocky canyons, open woodlands	В
Apodiformes		
Apodidae (swifts):		
Cypseloides niger (black swift))	crevices, caves, canyons in montane areas	Rare
Introduced species.		

Table 4. (continued)

Species	Habitat	Status
Chaetura vauxi (Vaux's swift)	forests	В
Aeronautes saxatalis (white-throated swift)	cliffs, canyons	В
Trochilidae (hummingbirds):		
Archilochus alexandri (black-chinned hummingbird)	open & riparian woodlands, gardens	В
Calypte anna (Anna's hummingbird)	open woodlands, gardens, meadows	Rare
Stellula calliope (Calliope hummingbird)	open montane forests & meadows, willow/alder thickets	В
Selasphorus platycercus (broad-tailed hummingbird) Selasphorus rufus (rufous hummingbird)	open woodlands, shrub hillsides, montane thickets coniferous forests, shrub hillsides	B B
Coraciiformes		
Alcedinidae (kingfishers): Ceryle alcyon (belted kingfisher)	along lakes strongs strong	p. 111
Piciformes	along lakes, streams, rivers	B, W
Picidae (woodpeckers):		
Melanerpes lewis (Lewis' woodpecker)	open forest & woodlands, often logged or burned	В
Melanerpes erythrocephalus (red-headed woodpecker)	open woodlands, farm lands	Rare
Sphyrapicus nuchalis (red-naped sapsucker)	coniferous or mixed forests	В
Sphyrapicus thyroideus (Williamson's sapsucker)	montane coniferous forests	В
Picoides pubescens (downy woodpecker)	deciduous & mixed forests	B, W
Picoides villosus (hairy woodpecker)	deciduous or coniferous forests, open woodlands	B, W
Picoides albolarvatus (white-headed woodpecker)	montane coniferous forests	B, W
Picoides tridactylus (three-toed woodpecker)	coniferous forests	B, W
Picoides arcticus (black-backed woodpecker)	coniferous forests, especially windfall & burned	B, W
Colaptes auratus (northern flicker)	forests, open woodlands, riparian woodlands	B, W
Dryocopus pileatus (pileated woodpecker)	deciduous & coniferous mature forests	B, W
Passeriformes	accidental of commercial material forces	۵, ,,
Tyrannidae (tyrant flycatchers):		
Contopus borealis (olive-sided flycatcher)	forests & woodlands, especially burned	В
Contopus sordidulus (western wood-pewee)	forests, forest edge, woodlands, riparian woodlands	В
Empidonax traillii (willow flycatcher)	willow thickets, swamps, open woodlands	В
Empidonax minimus (least flycatcher)	open woodlands, brush, forest edge	Rare
Empidonax hammondii (Hammond's flycatcher)	coniferous forests	В
Empidonax oberholseri (dusky flycatcher)	aspen groves, willow thickets, open coniferous forests	В
Empidonax wrightii (gray flycatcher)	arid woodlands & shrub steppe	В
Empidonax difficilis (western flycatcher)	humid, coniferous, montane forests	В
Sayornis phoebe (eastern phoebe)	open woodlands & farm lands, near water	Α
Sayornis saya (Say's phoebe)	shrub steppe, cliffs, mines, ranch buildings	B, W
Mylarchus cinerascens (ash-throated flycatcher)	shrub steppe, juniper woodlands	В
Tyrannus vociferans (Cassin's kingbird)	pinyon/juniper woodlands	A
Tyrannus verticalis (western kingbird)	shrub steppe, agricultural lands with scattered trees	В
Tyrannus tyrannus (eastern kingbird)	riparian woodlands, farm lands	В
Tyrannus forficatus (scissor-tailed flycatcher)	dry grasslands, farm lands, open country	A
Alaudidae (larks):	greenlands about atoms	n
Eremophila alpestris (horned lark) Hirundinidae (swallows):	grasslands, shrub steppe, grazed pasture, farm lands	B, W
Progne subis (purple martin)	open areas near water, urban areas	Rare
Tachycineta bicolor (tree swallow)	open areas near water	В
Tachycineta thalassina (violet-green swallow)	open coniferous, deciduous, or mixed forests	В
Stelgidopteryx serripennis (northern rough-winged swallow)	open areas along water courses	В
Riparia riparia (bank swallow)	sand & gravel banks along water courses	В
Hirundo pyrrhonota (cliff swallow)	open areas near water, especially cliffs, bridges, dams	В
Hirundo rustica (barn swallow)	open areas near water, especially buildings & bridges	В
Corvidae (jays, magpies, and crows):		
Perisoreus canadensis (gray jay)	coniferous & mixed forests	B, W
Cyanocitta stelleri (Steller's jay)	coniferous & mixed forests	B, W
Cyanocitta cristata (blue jay)	forests, open woodlands, residential areas	Rare

Table 4. (continued)

Species	Habitat	Status
Aphelocoma coerulescens (scrub jay)	pinyon/juniper woodlands, riparian areas	B, W
Gymnorhinus cyanocephalus (pinyon jay)	pinyon/juniper woodlands	B, W
Nucifraga columbiana (Clark's nutcracker)	open coniferous forests, forest edge	B, W
Pica pica (black-billed magpie)	riparian, farm lands, woodlands, forest edge, shrub steppe	B, W
Corvus brachyrhynchos (American crow)	open forest & woodlands, farm lands, urban areas	B, W
Corvus corax (common raven)	from lowlands to mountains & deserts to forests	B, W
Paridae (titmice):		-
Parus atricapillus (black-capped chickadee)	deciduous or mixed woodlands	B, W
Parus gambeli (mountain chickadee)	montane coniferous forests	B, W
Parus hudsonicus (boreal chickadee)	boreal coniferous forests	Rare
Parus rufescens (chestnut-backed chickadee)	coniferous and mixed forests	B, W
Parus inornatus (plain titmouse)	pinyon/juniper woodlands	B, W
Aegithalidae (bushtits):		
Psaltriparus minimus (bushtit)	pinyon/juniper woodlands, shrub steppe	B, W
Sittidae (nuthatches):		
Sitta canadensis (red-breasted nuthatch)	coniferous & mixed forests	B, W
Sitta carolinensis (white-breasted nuthatch)	forests & woodlands, deciduous & mixed	B, W
Sitta pygmaea (pygmy nuthatch)	pine forests & woodlands	B, W
Certhiidae (creepers):		
Certhia americana (brown creeper)	coniferous & deciduous forests	B, W
roglodytidae (wrens):	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
Salpinctes obsoletus (rock wren)	exposed rocks, canyons, cliffs	В
Catherpes mexicanus (canyon wren)	cliffs, steep canyons, rocky outcrops	B, W
Thryomanes bewickii (Bewick's wren)	brushy areas & thickets, riparian woodlands	Α
Troglodytes aedon (house wren)	thickets, woodlands, farm lands, forest edge	В
Troglodytes troglodytes (winter wren)	dense coniferous forest near water	B, W
Cistothorus palustris (marsh wren) Cinclidae (dippers):	marshes	B, W
Cinclus mexicanus (American dipper) Muscicapidae (muscicapids):	montane streams	B, W
Regulus satrapa (golden-crowned kinglet)	coniferous forests & woodlands	B, W
Regulus calendula (ruby-crowned kinglet)	coniferous forests, mixed woodlands	B, W
Polioptila caerulea (blue-gray gnatcatcher)	juniper woodlands	В
Sialia mexicana (western bluebird)	open coniferous, deciduous, & mixed forests	B, W
Sialia currucoides (mountain bluebird)	open coniferous forests, subalpine meadow, pinyon/juniper woodlands, shrub steppe	B, W
Myadestes townsendi (Townsend's solitaire)	montane coniferous forests, rocky cliffs, adjacent brushy areas	B, W
Catharus fuscescens (veery)	montane riparian areas	В
Catharus minimus (gray-cheeked thrush)	coniferous forests	A
Catharus ustulatus (Swainson's thrush)	coniferous forests; aspen, willow, alder thickets	В
Catharus guttatus (hermit thrush)	humid coniferous forests, mixed forests, forest edge	B, W
Hylocichla mustelina (wood thrush)	deciduous forests & woodlands	A A
Turdus migratorius (American robin)	forests, woodlands, parks, thickets, gardens, farm lands	B, W
Ixoreus naevius (varied thrush)	humid, montane coniferous forests	B, W
Mimidae (mockingbirds, thrashers):		_
Dumetella carolinensis (gray catbird)	thickets, dense shrub, forest edge	В
Mimus polyglottos (northern mockingbird)	forest edge, shrub steppe, farm lands, gardens, towns	Rare
Oreoscoptes montanus (sage thrasher)	sagebrush steppe	В
Toxostoma rufum (brown thrasher) Motacillidae (pipits):	deciduous forest clearings and edge	Rare
Anthus spinoletta (water pipit) Bombycillidae (waxwings):	alpine meadows, shrub steppe	В
Bombycilla garrulus (Bohemian waxwing)	open coniferous or deciduous forests, parks	W
Bombycilla cedrorum (cedar waxwing)	open woodlands, forest edge, parks, orchards, gardens	B, W

Table 4. (continued)

Species	Habitat	Status
Laniidae (shrikes):		
Lanius excubitor (northern shrike)	open coniferous or deciduous forests, shrub steppe, farm lands	W
Lanius ludovicianus (loggerhead shrike)	shrub steppe, open woodlands	B, W
Sturnidae (starlings):		
Sturnus vulgaris (European starling)1	most habitats except dense forests	B, W
Vireonidae (vireos):		
Vireo solitarius (solitary vireo)	mixed woodlands, montane forests	В
Vireo gilvus (warbling vireo)	open mixed woodlands, riparian, orchards, parks	В
Vireo olivaceus (red-eyed vireo)	open coniferous forests, woodlands, thickets	В
Emberizidae (emberizids):	the second contract of	
Vermivora chrysoptera (golden-winged warbler)	open deciduous woodlands	Α
Vermivora peregrina (Tennessee warbler)	coniferous & deciduous woodlands, alder & willow thickets	Rare
Vermivora celata (orange-crowned warbler)	deciduous & mixed woodlands, shrub steppe, riparian thickets	В
Vermivora ruficapilla (Nashville warbler)	open deciduous or coniferous woodlands, forested bogs	В
Vermivora virginiae (Virginia's warbler)	pinyon/juniper woodlands	В
Dendroica petechia (yellow warbler)	riparian areas, woodlands, thickets,	В
Dendroica pensylvanica (chestnut-sided warbler) Dendroica magnolia (magnolia warbler)	open deciduous woodlands, forest edge open coniferous or mixed woodlands, forest edge	Rare
Dendroica tigrina (Cape May warbler)	boreal coniferous forests, forest edge, open woodlands	A
Dendroica caerulescens (black-throated blue warbler)	understory of deciduous or mixed woodlands	Rare
Dendroica coronata (yellow-rumped warbler)	coniferous & deciduous forests, open woodlands	B, W
Dendroica nigrescens (black-throated gray warbler)	pinyon/juniper woodlands	В
Dendroica townsendi (Townsend's warbler)	coniferous & mixed forests	В
Dendroica palmarum (palm warbler)	bogs, open boreal coniferous forests	A
Dendroica castanea (bay-breasted warbler) Dendroica striata (blackpoll warbler)	boreal coniferous forests boreal coniferous forests & woodlands	A Rare
Mniotilta varia (black-&-white warbler)	deciduous & mixed forests & woodlands	Rare
Setophaga ruticilla (American redstart)	open deciduous & mixed woodlands, tall shrubs	В
Seiurus aurocapillus (ovenbird)	deciduous forests, mixed woodlands	Rare
Seiurus noveboracensis (northern waterthrush)	thickets near water, swamps, bogs	В
Oporornis tolmiei (MacGillivray's warbler)	coniferous forest undergrowth, riparian thickets	В
Geothlypis trichas (common yellowthroat) Wilsonia pusilla (Wilson's warbler)	marshes, thickets near water, bogs, old fields	В
Icteria virens (yellow-breasted chat)	shrubs near water, bogs, riparian thickets riparian thickets, woodland undergrowth	B B
Piranga ludoviciana (western tanager)	open montane coniferous & mixed woodlands	В
Pheucticus ludovicianus (rose-breasted grosbeak)	forests, woodlands	Rare
Pheucticus melanocephalus (black-headed grosbeak) Guiraca caerulea (blue grosbeak)	deciduous forests & woodlands shrub steppe with scattered trees,	B B, Rare
Passaulas amana (lavelt hundred)	riparian woodlands, thickets	
Passerina amoena (lazuli bunting) Passerina cyanea (indigo bunting)	arid canyons, riparian thickets, open woodlands forests, woodlands, shrub steppe	B
Pipilo chlorurus (green-tailed towhee)	thickets, shrub steppe, montane riparian areas	Rare B
Pipilo erythrophthalmus (rufous-sided towhee)	undergrowth of open woodlands, forest edge, shrub steppe, riparian thickets	B, W
Spizella arborea (American tree sparrow)	weedy fields, fence rows, thickets	W
Spizella passerina (chipping sparrow)	open coniferous forests & forest edge	В
Spizella pallida (clay-colored sparrow)	shrub & thickets near water, shrub steppe, fence rows	A
Spizella breweri (Brewer's sparrow) Pooecetes gramineus (vesper sparrow)	sagebrush steppe	В
Chondestes grammacus (lark sparrow)	shrub steppe, weedy pastures, woodland clearings shrub steppe, forest edge, farm lands	B B
Amphispiza bilineata (black-throated sparrow)	shrub steppe, salt-desert shrub	В
Amphispiza belli (sage sparrow)	sagebrush steppe	В
Calamospiza melanocorys (lark bunting)	sagebrush steppe, farm lands	M
Passerculus sandwichensis (savannah sparrow)	grasslands, meadows, bogs, farm lands, marshes	В
Ammodramus bairdii (Baird's sparrow)	open grasslands, overgrown fields	Α

Table 1 (concluded)

Species	Habitat	Status
Ammodramus savannarum (grasshopper sparrow)	open grasslands, farm lands	В
Ammodramus leconteii (Le Conte's sparrow)	moist grass or sedge meadows	A
Passerella iliaca (fox sparrow)	undergrowth of forest, forest edge, thickets, riparian woodlands	В
Melospiza melodia (song sparrow)	riparian areas, thickets, marshes	B. W
Melospiza lincolnii (Lincoln's sparrow)	bogs, wet meadows, riparian thickets	В
Melospiza georgiana (swamp sparrow)	marshes, bogs, weedy fields, forest edge	Rare
Zonotrichia albicollis (white-throated sparrow)	coniferous & mixed forests, forest edge, bogs, thickets	Rare
Zonotrichia atricapilla (golden-crowned sparrow)	montane thickets & shrubs, dwarf conifers	A
Zonotrichia leucophrys (white-crowned sparrow)	shrub steppe, willow thickets, woodlands, forest edge, montane forest	B, W
Zonotrichia querula (Harris' sparrow)	thickets, open woodlands, forest edge	M
Junco hyemalis (dark-eyed junco)	coniferous & deciduous forests, forest edge, clearings, bogs	B, W
Calcarius mccownii (McCown's longspur)	shrub steppe, plowed & stubble fields	Rare
Calcarius pictus (Smith's longspur)	grasslands, plowed & stubble fields	Α
Calcarius lapponicus (Lapland longspur)	grasslands, plowed & stubble fields	Rare
Plectrophenax nivalis (snow bunting)	grasslands, stubble fields, roadsides, lakeshores	W
Dolichonyx oryzivorus (bobolink)	tall grasslands, flooded meadows, alfalfa fields	В
Agelaius phoeniceus (red-winged blackbird)	marshes, riparian shrubs & trees, farm lands	B. W
Sturnella neglecta (western meadowlark)	grasslands, farm lands, shrub steppe	B, W
Xanthocephalus xanthocephalus (yellow-headed blackbird)	marshes	В
Euphagus carolinus (rusty blackbird)	woodlands, shrub steppe, pastures, farm lands	Rare
Euphagus cyanocephalus (Brewer's blackbird)	shrub steppe near water, riparian woodlands, marshes	B, W
Quiscalus mexicanus (great-tailed grackle)	farm lands, pastures, around human habitation	Α
Quiscalus quiscula (common grackle)	open woodlands, forest edge, urban areas	B, Rar
Molothrus ater (brown-headed cowbird)	woodlands, forests, forest edge, shrub steppe	В
Icterus galbula (northern oriole)	open woodlands, riparian woodlands, forest edge, orchards	В
Icterus parisorum (Scott's oriole)	pinyon/juniper woodlands	B, Rare
ringillidae (finches):		
Leucosticte arctoa (rosy finch)	barren, rocky, grassy areas & cliffs, fields, farm lands	B, W
Pinicola enucleator (pine grosbeak)	open coniferous forests, forest edge	B, W
Carpodacus purpureus (purple finch)	tall shrubs, weedy areas, around human habitation	A
Carpodacus cassinii (Cassin's finch)	open coniferous forests, deciduous woodlands	B, W
Carpodacus mexicanus (house finch)	shrub steppe, urban areas, farm lands	B, W
Loxia curvirostra (red crossbill)	coniferous & mixed forests	B, W
Loxia leucoptera (white-winged crossbill)	coniferous forests, mixed woodlands	Rare
Carduelis flammea (common redpoll)	woodlands, weedy fields, fence rows, farm lands	W
Carduelis hornemanni (hoary redpoll) ²	fields, open woodlands	Α
Carduelis pinus (pine siskin)	coniferous & mixed forests, woodlands, suburban areas	B, W
Carduelis psaltria (lesser goldfinch)	woodland edge, open fields, pastures	Rare
Carduelis tristis (American goldfinch)	weedy fields, farm lands, riparian woodlands, around human habitation	B, W
Coccothraustes vespertinus (evening grosbreak)	coniferous & mixed woodlands, parks	B, W
Passeridae (Old World sparrows):		=, .,
Passer domesticus (house sparrow) ¹	farm lands, fields, woodlands, around human habitation	B, W

¹ Introduced species. ² Probably conspecific with common redpoll.

Table 5. Mammalian species in Idaho, their habitats, and distribution. Numbers given in Distribution column refer to Idaho Department of Fish and Game Regions (see Figure 1).

Species	Habitat	Distribution
Marsupialia (marsupials)		
Didelphidae (New World opossums):		
Didelphis virginiana (Virginia opossum) ¹	farm lands, woodlands	2,3
Insectivora (insectivores)		
Soricidae (shrews):		
Sorex cinereus (masked shrew)	moist forests	1,2,3,4,5,6
Sorex preblei (Preble's shrew)	marshes, sagebrush steppe	2
Sorex vagrans (vagrant shrew)	moist areas at lower elevations	2,3,4,6
Sorex monticolus (dusky shrew)	moist forests at higher elevations	1,2,3,5,6
Sorex palustris (water shrew)	near mountain streams & lakes	1,2,3,4,5,6
Sorex merriami (Merriam's shrew)	sagebrush steppe	2,3,4,5,6
Sorex hoyi (pygmy shrew)	wet or dry forests	1
Talpidae (moles):	Well of any lending	-
Scapanus orarius (coast mole)	farm lands	3
Chiroptera (bats)	.am mad	~
Vespertilionidae (vespertilionid bats):		
Myotis lucifugus (little brown myotis)	onen foreste rocky areas	123456
Myotis vumanensis (Yuma myotis)	open forests, rocky areas arid areas, caves, buildings	1,2,3,4,5,6
		1,2,3,6
Myotis evotis (long-eared myotis)	open forests, caves, buildings	1,2,3,4,5,6
Myotis thysanodes (fringed myotis)	dry forests	2,3,4,6
Myotis volans (long-legged myotis)	buildings, rocky crevices	1,2,3,4,5,6
Myotis californicus (California myotis)	mines, caves, rocky crevices	1,2,3,4,6
Myotis leibii (small-footed myotis)	caves, mines, & crevices near forests	2,3,4,5,6
Lasionycteris noctivagans (silver-haired bat)	wet or dry forests	1,2,3,4,5,6
Pipistrellus hesperus (western pipistrelle)	caves, cliffs, & crevices near water	3,4
Eptesicus fuscus (big brown bat)	caves, crevices, buildings, woodlands	1,2,3,4,5,6
Lasiurus cinereus (hoary bat)	woodlands	1,2,3,4,5,6
Euderma maculatum (spotted bat)	rocky crevices, desert, coniferous	3
	forests	
Plecotus townsendii (Townsend's big-eared bat)	caves, mines, buildings, rocky crevices	1,2,3,4,5,6
Antrozous pallidus (pallid bat)	caves, mines, buildings, rocky crevices	2,3,5
Lagomorpha (lagomorphs)	and the second s	255
Ochotonidae (pikas):		
Ochotona princeps (pika)	talus slopes at high elevation	1,2,3,4,5,6
Leporidae (hares, rabbits):		26212121212
Brachylagus idahoensis (pygmy rabbit) ²	sagebrush steppe	3,4,5,6
Sylvilagus nuttallii (Nutall's cottontail)	shrub steppe, rocky & riparian areas	2,3,4,5,6
Lepus americanus (snowshoe hare)	coniferous forests, bogs	1,2,3,4,5,6
Lepus townsendii (white-tailed jackrabbit)	sagebrush steppe, grasslands	1,2,3,4,5,6
Lepus californicus (black-tailed jackrabbit)	shrub steppe	3,4,5,6
Rodentia (rodents)		04-4-4-6
Sciuridae (squirrels):		
Tamias minimus (least chipmunk)	sagebrush steppe, open forests	3,4,5,6
Tamias amoenus (yellow-pine chipmunk)	open coniferous forests	1,2,3,4,5,6
Tamias dorsalis (cliff chipmunk)	pinyon/juniper woodlands	4
Tamias ruficaudus (red-tailed chipmunk)	dense coniferous forests	1,2
Tamias umbrinus (Uinta chipmunk)	open coniferous forests	5,6
Marmota monax (woodchuck)	open forests, rocky areas	1
Marmota flaviventris (yellow-bellied marmot)	rocky areas	1,2,3,4,5,6
Marmota caligata (hoary marmot)	rocky areas at high elevation	1,2
Ammospermophilus leucurus (white-tailed antelope squirrel) Spermophilus townsendii (Townsend's ground squirrel)	sagebrush steppe	3,4
Spermophilus brunneus (Idaho ground squirrel)	shrub steppe	3,4,5,6
Spermophilus elegans (Wyoming ground squirrel)	sagebrush steppe montane meadows	3
Spermophilus armatus (Uinta ground squirrel)	farm lands, montane meadows	5,6 5,6
	idini idilus, montane meadows	3.0

Introduced species.

² We have accepted Green and Flinders (1980) placement of this rabbit in the monotypic genus, Brachylagus.

Table 5. (continued)

Species	Habitat	Distribution
Spermophilus columbianus (Columbian ground squirrel)	open forests, montane meadows	1,2,3,4,5,6
Spermophilus variegatus (rock squirrel)	rocky areas	5
Spermophilus lateralis (golden-mantled ground squirrel)	open forests, rocky areas, at higher elevation	1,2,3,4,5,6
Sciurus carolinensis (gray squirrel)1	urban areas	1,2
Sciurus niger (fox squirrel) ¹	urban areas	1,2,3,4,5,6
Tamiasciurus hudsonicus (red squirrel)	coniferous forests	1,2,3,4,5,6
Glaucomys sabrinus (northern flying squirrel)	coniferous forests	1,2,3,4,5,6
Geomyidae (pocket gophers):		CACACACACAC
Thomomys townsendii (Townsend's pocket gopher)	farm lands	3
Thomomys talpoides (northern pocket gopher)	sagebrush steppe, montane meadows	1,2,3,4,5,6
Thomomys idahoensis (Idaho pocket gopher)	sagebrush steppe, montane meadows	5,6
Heteromyidae (heteromyids):	•	
Perognathus longimembris (little pocket mouse)	shrub steppe	3,4
Perognathus parvus (Great Basin pocket mouse)	sagebrush steppe	3,4,5,6
Microdipodops megacephalus (dark kangaroo mouse)	sandy, shrub steppe	3
Dipodomys ordii (Ord's kangaroo rat)	sagebrush steppe	3,4,5,6
Dipodomys microps (chisel-toothed kangaroo rat)	salt desert shrub	3,4
Castoridae (beavers):		3.7
Castor canadensis (beaver)	streams, ponds, riparian areas	1,2,3,4,5,6
Cricetidae (cricetids):	salas, pondo, riparian areas	1,2,0,1,0,0
Reithrodontomys megalotis (western harvest mouse)	grasslands	3,4,5,6
Peromyscus crinitus (canyon mouse)	rocky, dry canyons	3,4
Peromyscus maniculatus (deer mouse)	all terrestrial habitats	1,2,3,4,5,6
Peromyscus truei (piñon mouse)	pinyon/juniper woodlands, shrub	
	steppe	3,4
Onychomys leucogaster (northern grasshopper mouse)	sagebrush steppe	3,4,5,6
Neotoma lepida (desert woodrat)	shrub steppe	3,4
Neotoma cinerea (bushy-tailed woodrat)	rocky canyons, caves, mines, basalt outcrops, talus	1,2,3,4,5,6
Clethrionomys gapperi (southern red-backed vole)	dense coniferous forests	1,2,3,4,5,6
Microtus pennsylvanicus (meadow vole)	moist grasslands	1,2,4,5,6
Microtus montanus (montane vole)	grasslands	1,2,3,4,5,6
Microtus longicaudus (long-tailed vole)	shrub grasslands at higher elevations	1,2,3,4,5,6
Microtus richardsoni (water vole)	montane stream banks, lake shores, moist meadows	1,2,3,4,5,6
Phenacomys intermedius (heather vole)	montane grasslands, coniferous forests	1,2,3,4,5,6
Lemmiscus curtatus (sagebrush vole)	sagebrush steppe	3,4,5,6
Synaptomys borealis (northern bog lemming)	bogs, wet meadows	1
Ondatra zibethica (muskrat)	marshes, ponds, streams, lakes	1,2,3,4,5,6
Muridae (murids):	parties, encouries, idited	-,-,0,1,0,0
Rattus norvegicus (Norway rat) ¹	urban areas	1,2,3,4,5,6
Mus musculus (house mouse)1	urban areas, farm lands	1,2,3,4,5,6
Zapodidae (jumping mice):	sioni dicas, idili idilas	1,2,0,4,0,0
Zapus princeps (western jumping mouse)	wet meadows, riparian areas	1,2,3,4,5,6
Erethizontidae (New World porcupines):	wet ineddows, riparian areas	1,2,3,4,3,0
Erethizon dorsatum (porcupine)	juniper woodlands coniferent forms	122456
	juniper woodlands, coniferous forests, riparian areas	1,2,3,4,5,6
Myocastoridae (myocastorids):		
Myocaster coypus (nutria) ¹	marshes, ponds, lakes	?
Carnivora (carnivores)		
Canidae (canids):		
Canis latrans (coyote)	shrub steppe, farm lands, open forests	1,2,3,4,5,6
Canis lupis (gray wolf)	forested areas interspersed with	1,2,3,6
Visings makes (and four)	meadows	D C0/27 2 3 7 7
Vulpes vulpes (red fox)	farm lands, sagebrush steppe, open	1,2,3,4,5,6

Table 5. (concluded)

Species	Habitat	Distribution
Vulpes macrotis (kit fox)	sandy shrub steppe	3,4,5
Ursidae (bears):		
Ursus americanus (black bear)	forests, wet meadows, riparian & burned areas	1,2,3,4,5,6
Ursus arctos (grizzly bear)	remote subalpine forests & meadows	1,2,6
Procyonidae (procyonids):		
Procyon lotor (raccoon)	sagebrush steppe, open forests near water	1,2,3,4,5,6
Mustelidae (mustelids):		
Martes americana (marten)	coniferous forests	1,2,3,4,5,6
Martes pennanti (fisher)	dense coniferous and mixed forests	1,2,3
Mustela erminea (ermine)	farm lands, coniferous forests, riparian areas	1,2,3,4,5,6
Mustela frenata (long-tailed weasel)	open forests, shrub steppe, farm lands	1,2,3,4,5,6
Mustela vison (mink)	near streams, rivers, and lakes at lower elevation	1,2,3,4,5,6
Gulo gulo (wolverine)	coniferous forests	1,2,3,6
Taxidea taxus (badger)	sagebrush steppe, farm lands, open forests	1,2,3,4,5,6
Spilogale gracilis (western spotted skunk)	farm lands near streams	2,3,4,5,6
Mephitis mephitis (striped skunk)	farm lands, riparian areas, marshes, rocky areas	1,2,3,4,5,6
Lutra canadensis (river otter)	in or near streams & lakes	1,2,3,4,5,6
Felidae (cats):		
Felis concolor (mountain lion)	open woodlands and forests, rocky areas	1,2,3,4,5,6
Felis lynx (lynx)	coniferous forests at high elevation	1,2,3,4,5,6
Felis rufus (bobcat)	shrub steppe, rocky canyons, open forests	1,2,3,4,5,6
Cervidae (cervids):		
Cervus elaphus (elk)	coniferous forests, montane meadows shrub steppe	1,2,3,4,5,6
Odocoileus hemionus (mule deer)	all habitats except dense forests	1,2,3,4,5,6
Odocoileus virginianus (white-tailed deer)	dense forests & woodlands, riparian areas, marshes	1,2,3,6
Alces alces (moose)	mixed forests, marshes, bogs	1,2,3,5,6
Rangifer tarandus (caribou)	spruce/fir forests	1
Antilocapridae (pronghorn):		
Antilocapra americana (pronghorn)	shrub steppe	3,4,5,6
Bovidae (bovids):		
Bison bison (bison)	lodgepole pine forests, sedge/grass meadows	6
Oreamnos americana (mountain goat)	steep cliffs, rocky ledges, alpine ridges	1,2,3,4,6
Ovis canadensis (mountain sheep)	deep canyons, alpine ridges	2,3,6

Literature Cited

- AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American birds. 6th edition. Allen Press Inc., Lawrence, KS. 877 pp.
- BURLEIGH, T.D. 1972. Birds of Idaho. Caxton Printers Ltd., Caldwell, ID. 467 pp.
- BURT, W.H. and R.P. GROSSENHEIDER. 1976. A field guide to the mammals. 3rd edition. Houghton Mifflin Co., Boston, MA. 289 pp.
- BURY, R.B., H.W. CAMPBELL, and N.J. SCOTT, JR. 1980. Role and importance of nongame wildlife. Transactions North American Wildlife and Natural Resources Conference 45:197-207.
- CHAPMAN, J.A. and G.A. FELDHAMER (eds.). 1982. Wild mammals of North America. Johns Hopkins University Press, Baltimore, MD. 1,147 pp.
- COLLINS, J.T., R. CONANT, J.E. HOHEEY, J.L. KNIGHT, E.M. RONDQUIST, and H.M. SMITH. 1982. Standard

- common and current scientific names for North American amphibians and reptiles. 2nd edition. Society for the Study of Amphibians and Reptiles, Herpetological Circular No. 12. 218 pp.
- FINLEY, R.F. 1980. Deficiencies and training needs in nongame wildlife management. Transactions North American Wildlife and Natural Resources Conference 45:268-270.
- GREEN, J.S. and J.T. FLINDERS. 1980. Mammalian Species No. 125, American Society Mammalogists, Lawrence, KS.
- HALL, E.R. 1981. The mammals of North America. 2nd edition. John Wiley and Sons, NY. 1,181 pp.
- IDAHO DEPARTMENT OF FISH AND GAME. 1981. Nongame species management plan. Boise, ID. 65 pp.
- JACKSON, J.J. 1982. Public support for nongame and endangered wildlife management: which way is it going? Transactions North American Wildlife and Natural Resources Conference 47:432-440.
- JONES, J.K., JR., D.C. CARTER, H.H. GENOWAYS, R.S. HOFFMANN, and D.W. RICE. 1982. Revised checklist of North American mammals north of Mexico, 1982. Occasional Papers The Museum Texas Tech University, Number 80:1-22.
- LARRISON, E.J. AND D.R. JOHNSON. 1981. Mammals of Idaho. University Press of Idaho, Moscow, ID. 166 pp.
- LARRISON, E.J., J.L. TUCKER, and M.T. JOLLIE. 1967.
 Guide to Idaho birds. Journal of the Idaho Academy of Science 5:1-220.
- LEE, D.S., C.R. GILBERT, C.H. HOCUTT, R.E. JENKINS, D.E. McALLISTER, and J.R. STAUFFER, JR. 1980. Atlas of North American freshwater fishes. North Carolina Biological Survey, Raleigh. 867 pp.
- LINDER, A.D. and E. FICHTER. 1977. The amphibians and reptiles of Idaho. Idaho State University Press, Pocatello, ID. 78 pp.
- MARSHALL, D.B. 1984. Review draft—nongame wildlife management plan for Oregon. Oregon Department Fish and Wildlife, Portland, OR.
- NUSSBAUM, R.A., E.D. BRODIE, JR., and R.M. STORM. 1983. Amphibians and reptiles of the Pacific Northwest. University Press of Idaho, Moscow, ID. 332 pp.
- ROBBINS, C.S., B. BRUUN, H.S. ZIM, and A. SINGER. 1983. A guide to field identification: Birds of North America. Golden Press, New York, N.Y. 360 pp.
- ROBINS, C.R., R.M. BAILEY, C.E. BOND, J.R. BROOKER, E.A. LACHNER, R.N. LEA, and W.B. SCOTT. 1980. A list of common and scientific names of fishes from the United States and Canada. 4th edition. American Fisheries Society Special Publication No. 12. 174 pp.

- SIMPSON, J.C. and R.L. WALLACE. 1982. Fishes of Idaho. University Press of Idaho, Moscow, ID. 238 pp.
- SMITH, H.M. 1978. A guide to field identification: amphibians of North America. Golden Press, New York, N.Y. 160 pp.
- STEBBINS, R.C. 1985. A field guide to western reptiles and amphibians. Houghton Mifflin Co., Boston, MA. 270 pp.
- TAYLOR, D.T. and C.H. TROST. In press. The status of rare birds in Idaho, Murrelet.

References

Field Guides

- National Geographic Society. 1983. Field guide to the birds of North America. National Geographic Society, Washington, D.C. 464 pp.
- Peterson, R.T. 1961. A field guide to western birds. Houghton Mifflin, Boston, 309 pp.
- Robbins, C.S., B. Bruun, and H.S. Zim, and A. Singer. 1983. A guide to field identification: Birds of North America. Golden Press, New York, N.Y. 360 pp.

Checklists

- A checklist for the birds of southwestern Idaho. Compiled by D. Stephens and T. Reynolds. Available from: Golden Eagle Audubon Society, Boise, ID.
- Birds of Big Creek and Chamberlain Basin, Idaho Primitive Area, field checklist. Compiled by J.C. Seidensticker and R.E. Welch. Available from: Payette National Forest, Mc-Call. ID.
- Birds of Idaho field checklist. Compiled by C.H. Trost, S. Findholt, and T. Rich. Available from: Department of Biological Sciences, Idaho State University, Pocatello, ID.
- Birds of the Coeur d'Alene latilong. Compiled by and available from Shirley Sturts, Coeur d'Alene, ID.
- Birds of the Palouse Region field checklist. Compiled by and available from Palouse Audubon Society, Moscow, ID.
- 1983 Inventory of the Birds of Idaho. Compiled by M.R. Collie. Available from: Idaho Department of Fish and Game, Boise, ID.
- The Snake River Birds of Prey Study Area List. Compiled by A. Bammann and J.H. Doremus. Available from: Boise District, U.S. Bureau of Land Management Office, Boise, ID.
- Vertebrates of the Idaho National Engineering Laboratory. Compiled by W.J. Arthur, J.W. Connelly, D.K. Halford, and T.D. Reynolds. Available from U.S. Department of Energy, Idaho Falls, ID.