## Observed S

Species

| Greater White-front. Goose |
| :--- |
| Snow Goose |
| Ross's Goose |
| Brant |
| Cackling Goose |
| Canada Goose |
| Mute Swan |
| Trumpeter Swan |
| Tundra Swan |
| Wood Duck |
| Gadwall |
| Eurasian Wigeon |
| American Wigeon |
| American Black Duck |
| Mallard |
| Blue-winged Teal |
| Northern Shoveler |
| Northern Pintail |
| Green-winged Teal |
| Canvasback |
| Redhead |
| Ring-necked Duck |
| Greater Scaup |
| Lesser Scaup |
| King Eider |
| Harlequin Duck |
| Surf Scoter |
| White-winged Scoter |
| Black Scoter |
| Long-tailed Duck |
| Bufflehead |
| Common Goldeneye |
| Barrow's Goldeneye |
| Hooded Merganser |
| Common Merganser |


| 1 X |  | X | X | X | X | X | X | X | X | X |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 X | X |  | X |  | X | X |  |  | X | X |
| 1 | X |  |  | X |  |  |  |  |  | X |
| 1 X |  | X |  |  |  |  |  | X |  |  |
| 1 | X |  |  |  | X | X | X | X |  |  |
| 1 |  |  |  | X |  | X | X | X |  | X |
| 1 |  |  |  |  |  | X | $X$ | X |  |  |
| 1 | $X$ |  | X |  |  |  | X |  |  |  |
| 1 X | X | X | X | X | X | X | X | X | X | X |
| 1 |  |  |  |  |  |  | X |  | X | X |
| 1 |  |  |  |  |  | X | X | X | X | X |
| 1 |  |  |  |  |  |  | $X$ |  |  | $X$ |
| 1 |  |  |  |  |  | X | X | X | $X$ | X |
| 1 X |  | X | X |  | $X$ |  | X |  | X | X |
| 1 X | $x$ | X |  |  | $X$ | $X$ | $X$ | $X$ |  | $X$ |
| 1 | X |  | X |  | X | X | X | X |  | X |
| 1 |  | X |  |  |  |  |  | X |  |  |
| 1 |  |  | X |  |  |  | X | X | X | X |
| 1 |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |
| 1 X |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |
| 1 X |  | $X$ |  |  |  |  |  |  |  |  |
| 1 X |  | X | X |  | X | X | X | X | X | X |
| 1 X | X | X | X |  |  |  |  |  |  |  |
| 1 | X |  |  | $X$ | $X$ | $X$ | $X$ | X |  |  |
| 1 |  |  | X | X | X |  | X |  |  |  |


| Red-breasted Merganser | 1 X | X |  |  |  |  | X | $X$ | X | $X$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ruddy Duck | 1 X |  | X |  |  |  | X | X |  | X |
| Ring-necked Pheasant | 1 |  |  |  |  |  |  |  |  |  |
| Ruffed Grouse |  |  |  |  |  |  |  |  |  |  |
| Spruce Grouse |  |  |  |  |  |  |  |  |  |  |
| Sharp-tailed Grouse |  |  |  |  |  |  |  |  |  |  |
| Wild Turkey | 1 |  |  |  |  |  | X |  |  |  |
| Northern Bobwhite |  |  |  |  |  |  |  |  |  |  |
| Red-throated Loon | 1 |  |  |  |  |  |  |  |  |  |
| Pacific Loon* |  |  |  |  |  |  |  |  |  |  |
| Common Loon | 1 |  |  |  | X | X |  | X |  |  |
| Pied-billed Grebe | 1 |  |  |  |  | X | X | $X$ |  |  |
| Horned Grebe | 1 |  |  |  | X |  |  | $X$ | X | X |
| Red-necked Grebe |  |  |  |  |  |  |  |  |  |  |
| Eared Grebe |  |  |  |  |  |  |  |  |  |  |
| Western Grebe |  |  |  |  |  |  |  |  |  |  |
| American White Pelican | 1 |  |  |  |  |  |  |  |  | X |
| Brown Pelican |  |  |  |  |  |  |  |  |  |  |
| Double-crested Cormorant | 1 |  | X |  |  |  | X | X | X | X |
| American Bittern |  |  |  |  |  |  |  |  |  |  |
| Least Bittern | 1 |  |  |  |  |  |  |  |  |  |
| Great Blue Heron | 1 |  | X | X |  |  | X | $X$ | X | X |
| Great Egret | 1 |  |  |  |  | $X$ |  | X |  |  |
| Snowy Egret | 1 |  |  |  |  |  |  |  |  |  |
| Little Blue Heron |  |  |  |  |  |  |  |  |  |  |
| Tricolored Heron | 1 |  |  |  |  |  |  |  |  |  |
| Cattle Egret |  |  |  |  |  |  |  |  |  |  |
| Green Heron | 1 |  |  |  |  |  |  |  |  |  |
| Black-crown. Night-Heron | 1 |  |  |  |  |  |  |  |  |  |
| Yellow-crown. Night-Heron |  |  |  |  |  |  |  |  |  |  |
| Glossy Ibis |  |  |  |  |  |  |  |  |  |  |
| Black Vulture | 1 |  |  |  |  |  |  |  |  |  |
| Turkey Vulture | 1 |  |  |  |  | X | X | $X$ | $x$ |  |
| Osprey | 1 |  |  |  |  |  | X |  | X | X |
| Mississippi Kite |  |  |  |  |  |  |  |  |  |  |
| Bald Eagle | 1 X | X | X | X |  |  | X |  |  | X |
| Northern Harrier | 1 X |  | X | X |  |  | X |  |  |  |
| Sharp-shinned Hawk | 1 |  |  |  |  |  |  |  | X |  |
| Cooper's Hawk | 1 |  | X |  | X | X |  | X | X |  |
| Northern Goshawk |  |  |  |  |  |  |  |  |  |  |
| Red-shouldered Hawk | 1 X |  |  |  |  |  |  | X |  |  |
| Broad-winged Hawk | 1 |  |  |  |  |  |  |  | X |  |
| Swainson's Hawk |  |  |  |  |  |  |  |  |  |  |
| Red-tailed Hawk | 1 X | X | X | X | X | X | X | X | X | X |
| Rough-legged Hawk |  |  |  |  |  |  |  |  |  |  |
| Golden Eagle |  |  |  |  |  |  |  |  |  |  |
| American Kestrel | 1 | X | X |  | X |  |  |  |  |  |


| Merlin |
| :--- |
| Gyrfalcon |
| Peregrine Falcon |
| Yellow Rail |
| King Rail |
| Virginia Rail |
| Sora |
| Purple Gallinule |
| Common Moorhen |
| American Coot |
| Sandhill Crane |
| Whooping Crane |
| Black-bellied Plover |
| American Golden-Plover |
| Semipalmated Plover |
| Piping Plover |
| Killdeer |
| American Avocet |
| Spotted Sandpiper |
| Solitary Sandpiper |
| Greater Yellowlegs |
| Willet |
| Lesser Yellowlegs |
| Upland Sandpiper |
| Whimbrel |
| Hudsonian Godwit |
| Marbled Godwit |
| Ruddy Turnstone |
| Red Knot |
| Sanderling |
| Semipalmated Sandpiper |
| Western Sandpiper |
| Least Sandpiper |
| White-rumped Sandpiper |
| Baird's Sandpiper |
| Pectoral Sandpiper |
| Purple Sandpiper |
| Dunlin |
| Curlew Sandpiper |
| Stilt Sandpiper |
| Buff-breasted Sandpiper |
| Ruff |
| Short-billed Dowitcher |
| Long-billed Dowitcher |
| Wilson's Snipe |
| American Woodcock |
| Wilson's Phalarope |
|  |

1

1

1

1

| Red-necked Phalarope |
| :--- |
| Red Phalarope |
| Laughing Gull |
| Franklin's Gull |
| Little Gull |
| Bonaparte's Gull |
| Ring-billed Gull |
| California Gull |
| Herring Gull |
| Thayer's Gull |
| Iceland Gull |
| Black-headed Gull |
| Lesser Black-backed Gull |
| Glaucous Gull |
| Great Black-backed Gull |
| Sabine's Gull |
| Black-legged Kitiwake |
| Least Tern |
| Caspian Tern |
| Black Tern |
| Common Tern |
| Arctic Tern |
| Forster's Tern |
| Pomarine Jaeger |
| Parasitic Jaeger |
| Long-tailed Jaeger |
| Ancient Murrelet |
| Rock Pigeon |
| Eurasian Collared-Dove |
| White-winged Dove |
| Mourning Dove |
| Yellow-billed Cuckoo |
| Black-billed Cuckoo |
| Eastern Screech-Owl |
| Great Horned Owl |
| Snowy Owl |
| Northern Hawk Owl |
| Barred Owl |
| Great Gray Owl |
| Long-eared Owl |
| Short-eared Owl |
| Boreal Owl |
| Northern Saw-whet Owl |
| Common Nighthawk |
| Chuck-will's-widow |
| Whip-poor-will |
| Chimney Swift |

1

1

1
$1 X$
$\begin{array}{lllllll}1 X & X & X & X & X\end{array}$

1
1
1
$1 \quad \mathrm{X}$ X

1

1

1
$1 X \quad X \quad X \quad X$
$1 \times \quad X \quad X \quad X \quad X \quad X \quad X \quad X \quad X \quad X$
1

1
1 X
x X
x
$\begin{array}{llllllllll}1 & x & x & x & x & x & x & x & x & x\end{array} \quad x$
1

| Ruby-throated Hummingbird |
| :--- |
| Rufous Hummingbird* |
| Belted Kingfisher |
| Red-headed Woodpecker |
| Red-bellied Woodpecker |
| Yellow-bellied Sapsucker |
| Downy Woodpecker |
| Hairy Woodpecker |
| Am. Three-toed Woodpecker |
| Black-backed Woodpecker |
| Northern Flicker |
| Pileated Woodpecker |
| Olive-sided Flycatcher |
| Eastern Wood-Pewee |
| Yellow-bellied Flycatcher |
| Acadian Flycatcher |
| Alder Flycatcher |
| Willow Flycatcher |
| Least Flycatcher |
| Eastern Phoebe |
| Say's Phoebe |
| Great-crested Flycatcher |
| Western Kingbird |
| Eastern Kingbird |
| Scissor-tailed Flycatcher |
| Loggerhead Shrike |
| Northern Shrike |
| White-eyed Vireo |
| Bell's Vireo |
| Yellow-throated Vireo |
| Blue-headed Vireo |
| Warbling Vireo |
| Philadelphia Vireo |
| Red-eyed Vireo |
| Gray Jay |
| Blue Jay |
| Fish Crow |
| American Crow |
| Common Raven |
| Horned Lark |
| Purple Martin |
| Tree Swallow |
| N. Rough-winged Swallow |
| Bank Swallow |
| Cliff Swallow |
| Cave Swallow |
| Barn Swallow |
|  |

1

| 1 | $X$ |  | $X$ |  |  |  | $X$ |  | $X$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 |  | $X$ |  |  |  |  |  |  |  |
| 1 | $X$ | $X$ | $X$ |  | $X$ | $X$ | $X$ | $X$ | $X$ |
| 1 |  |  |  |  |  |  | $X$ |  |  |
| 1 | $X$ | $X$ | $X$ | $X$ | $X$ | $X$ | $X$ | $X$ | $X$ |
| 1 | $X$ |  |  | $X$ |  |  |  |  | $X$ |
| 1 |  |  |  |  |  |  |  |  |  |

1 X X X X X X X X X X
$1 \times \quad X \quad X \quad X \quad X \quad X \quad X \quad X \quad X$
1 X X X X X X X X X X
1 X X X X X X X X X
X X X
X
$\begin{array}{llll} & x & X & X \\ x & x & x\end{array}$
X
X
X X X

X X

X
X

| Black-capped Chickadee | 1 X | X | X | X | X | X | X | X | X | X |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carolina Chickadee | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Boreal Chickadee |  |  |  |  |  |  |  |  |  |  |  |  |
| Tufted Titmouse | 1 X | X | X |  |  | x | X | x | x | X |  |  |
| Red-breasted Nuthatch | 1 |  |  |  |  |  |  |  |  |  |  |  |
| White-breasted Nuthatch | 1 X | X | X | X | X | X | X | X | X | X |  |  |
| Brown Creeper | 1 |  |  | X |  | X |  |  |  |  |  |  |
| Rock Wren |  |  |  |  |  |  |  |  |  |  |  |  |
| Carolina Wren | 1 |  |  | X |  |  |  |  |  |  |  |  |
| House Wren | 1 |  |  |  |  |  |  |  |  | X | x |  |
| Winter Wren | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Sedge Wren |  |  |  |  |  |  |  |  |  |  |  |  |
| Marsh Wren | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Golden-crowned Kinglet | 1 |  |  | X |  | X |  | X | X |  |  |  |
| Ruby-crowned Kinglet | 1 |  |  |  |  |  |  |  |  | X |  |  |
| Blue-gray Gnatcatcher | 1 |  |  |  |  |  |  |  |  | X |  |  |
| Eastern Bluebird | 1 |  |  | X |  |  |  |  | X | X | x |  |
| Townsend's Solitaire |  |  |  |  |  |  |  |  |  |  |  |  |
| Veery | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Gray-cheeked Thrush |  |  |  |  |  |  |  |  |  |  |  |  |
| Swainson's Thrush | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Hermit Thrush | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Wood Thrush | 1 |  |  |  |  |  |  |  |  |  |  |  |
| American Robin | 1 X | X |  | X | X | X | X | X | X | X | X |  |
| Varied Thrush |  |  |  |  |  |  |  |  |  |  |  |  |
| Gray Catbird | 1 |  |  |  |  |  |  |  |  |  | x | X |
| Northern Mockingbird | 1 |  |  | X |  |  |  |  |  |  |  |  |
| Sage Thrasher |  |  |  |  |  |  |  |  |  |  |  |  |
| Brown Thrasher | 1 |  |  |  |  |  |  |  |  | X |  |  |
| European Starling | 1 X | X | X | X |  | X | X | X | X | X | X |  |
| American Pipit | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Bohemian Waxwing |  |  |  |  |  |  |  |  |  |  |  |  |
| Cedar Waxwing | 1 |  |  |  |  |  |  |  |  | X |  |  |
| Blue-winged Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Golden-winged Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Tennessee Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Orange-crowned Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Nashville Warbler | 1 |  |  |  |  |  |  |  |  | X |  |  |
| Northern Parula | 1 |  |  |  |  |  |  |  |  |  |  | x |
| Yellow Warbler | 1 |  |  |  |  |  |  |  |  | X | x |  |
| Chestnut-sided Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Magnolia Warbler | 1 |  |  |  |  |  |  |  |  |  |  | X |
| Cape May Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Black-throat. Blue Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Yellow-rumped Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Black-throa. Green Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Blackburnian Warbler |  |  |  |  |  |  |  |  |  |  |  |  |


| Yellow-throated Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pine Warbler | 1 |  |  |  |  |  |  |  |  | x |  |  |
| Kirtland's Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Prairie Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Palm Warbler | 1 |  |  |  |  |  |  |  |  | x |  |  |
| Bay-breasted Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Blackpoll Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Cerulean Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Black-and-white Warbler | 1 |  |  |  |  |  |  |  |  | X |  |  |
| American Redstart | 1 |  |  |  |  |  |  |  |  | X |  |  |
| Prothonotary Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Worm-eating Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Ovenbird | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Northern Waterthrush |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana Waterthrush |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Connecticut Warbler |  |  |  |  |  |  |  |  |  |  |  |  |
| Mourning Warbler | 1 |  |  |  |  |  |  |  |  |  |  | X |
| Common Yellowthroat | 1 |  |  |  |  |  |  | X |  |  | X |  |
| Hooded Warbler | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Wilson's Warbler | 1 |  |  |  |  |  |  |  |  |  |  | X |
| Canada Warbler | 1 |  |  |  |  |  |  |  |  |  |  | X |
| Yellow-breasted Chat |  |  |  |  |  |  |  |  |  |  |  |  |
| Summer Tanager |  |  |  |  |  |  |  |  |  |  |  |  |
| Scarlet Tanager | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Western Tanager |  |  |  |  |  |  |  |  |  |  |  |  |
| Green-tailed Towhee |  |  |  |  |  |  |  |  |  |  |  |  |
| Eastern Towhee | 1 |  |  |  |  |  |  |  |  | x |  |  |
| American Tree Sparrow | 1 X | x | x |  | X | x | x | x | x |  |  |  |
| Chipping Sparrow | 1 |  |  |  |  |  |  |  |  | x | x |  |
| Clay-colored Sparrow | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Field Sparrow | 1 |  |  |  |  |  |  |  |  | x |  |  |
| Vesper Sparrow |  |  |  |  |  |  |  |  |  |  |  |  |
| Lark Sparrow |  |  |  |  |  |  |  |  |  |  |  |  |
| Lark Bunting |  |  |  |  |  |  |  |  |  |  |  |  |
| Savannah Sparrow | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Grasshopper Sparrow |  |  |  |  |  |  |  |  |  |  |  |  |
| Henslow's Sparrow | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Le Conte's Sparrow |  |  |  |  |  |  |  |  |  |  |  |  |
| Nel. Sharp-tailed Sparrow |  |  |  |  |  |  |  |  |  |  |  |  |
| Fox Sparrow | 1 | X |  |  |  |  |  |  |  |  |  |  |
| Song Sparrow | 1 | X |  |  | X | x | x | x | x | X | x |  |
| Lincoln's Sparrow | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Swamp Sparrow | 1 |  |  |  |  |  |  | x |  | X |  |  |
| White-throated Sparrow | 1 | X |  | X |  |  |  |  |  | X |  |  |
| Harris's Sparrow |  |  |  |  |  |  |  |  |  |  |  |  |
| White-crowned Sparrow | 1 |  |  |  |  |  |  |  |  |  |  |  |


| Dark-eyed Junco |
| :--- |
| Lapland Longspur |
| Smith's Longspur |
| Snow Bunting |
| Northern Cardinal |
| Rose-breasted Grosbeak |
| Blue Grosbeak |
| Indigo Bunting |
| Painted Bunting |
| Dickcissel |
| Bobolink |
| Red-winged Blackbird |
| Eastern Meadowlark |
| Western Meadowlark |
| Yellow-headed Blackbird |
| Rusty Blackbird |
| Brewer's Blackbird |
| Common Grackle |
| Brown-headed Cowbird |
| Orchard Oriole |
| Baltimore Oriole |
| Pine Grosbeak |
| Purple Finch |
| House Finch |
| Red Crossbill |
| White-winged Crossbill |
| Common Redpoll |
| Hoary Redpoll |
| Pine Siskin |
| American Goldfinch |
| Evening Grosbeak |
| House Sparrow |
|  |


| 1 | X | X |  | X | X |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | X |  |  |  |  |  |  |  |  |
| 1 X | X | X | X | X | X | X | X | X | X | X |
| 1 |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  | X |
| 1 |  |  |  |  |  |  |  |  |  |  |
| 1 X |  |  | X |  | X | X | X | X | X | X |
| 1 |  |  |  |  |  |  | X |  |  |  |
| 1 |  |  |  |  |  |  | X | X |  |  |
| 1 |  |  | X |  | X | $X$ | $X$ | $X$ | $x$ | $X$ |
| 1 |  |  |  |  | X | X | X | X | X | X |
| 1 |  |  |  |  |  |  |  |  | X | X |
| 1 |  |  |  |  |  |  |  |  |  |  |
| 1 | X |  | X |  | X | X | X | X |  |  |
| 1 |  | $X$ | $X$ |  | X | X |  | X |  |  |
| 1 X | X | X | X |  |  |  |  |  | X | X |
| 1 |  |  |  |  |  | X |  | $X$ |  |  |
| 1 X | X | X | X |  | X | X | X | X | X |  |




$$
\begin{aligned}
& \begin{array}{lllll}
x & x & X & x & x \\
& X & & X
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \begin{array}{l} 
\\
X \quad X \quad X
\end{array} \\
& \text { X } \\
& \text { X X } \\
& \text { X } \\
& \text { X } \\
& \begin{array}{lllllll}
X & X & X & X & X & &
\end{array}
\end{aligned}
$$



X

$$
\begin{aligned}
& \begin{array}{lllllll}
x & x & x & x & x & x
\end{array} \\
& \text { X } \\
& \text { X } \\
& \text { X } \\
& \text { x } \\
& \text { X X X } \\
& \text { X } \quad \mathrm{x} \\
& \text { X } \begin{array}{llllll}
\text { X } & \text { X } & \text { X } & \text { X }
\end{array}
\end{aligned}
$$

$$
\begin{aligned}
& \text { X } \\
& \text { X }
\end{aligned}
$$

| $X$ | $X$ | $X$ | $X$ | $X$ | $X$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |




$$
\begin{aligned}
& x \quad x \quad x \\
& \begin{array}{l}
X \\
X \quad X \quad X
\end{array} \\
& \text { X } \\
& \text { X X } \\
& \text { X X X X } \\
& X \quad X \quad X \\
& \text { X } X \quad X
\end{aligned}
$$




X X X X
$\begin{array}{llllll} & x & x & x & x \\ x & x & x & x\end{array}$



