YELLOW-HEADED BLACKBIRD - XANTHOCEPHALUS XANTHOCEPHALUS

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Icteridae Genus:

Xanthocephalus Species: X. xanthocephalus

Habitat:

<u>Biomes</u>: Yellow-headed Blackbirds breed in wetlands in prairies, mountain meadows, quaking aspen parklands, and shallow areas of marshes, ponds, and rivers. They nest in cattails, bulrushes, or reeds, often alongside nesting Red-winged Blackbirds. To forage, they may move to surrounding grasslands, croplands, or savanna. In winter, Yellow-headed Blackbirds join up by the thousands into large flocks and forage in crop fields, ranchlands, and farmyards from Arizona, New Mexico, and Texas through much of Mexico. The northernmost wintering populations are mostly males, while the southern ones are mostly females.

Distribution:

<u>In US</u>: The breeding habitat of the yellow-headed blackbird is cattail marshes in North America, mainly west of the Great Lakes. These birds migrate in the winter to the southwestern United States and Mexico. They often migrate in huge flocks with other species of birds. The only regions of the United States where these blackbirds are permanent residents are the San Joaquin Valley and the Lower Colorado River Valley of Arizona and California. It is an extremely rare vagrant to western Europe, with some records suspected to refer to escapes from captivity.

In Other Countries: ^^^

<u>Holistic Description</u>: With a golden head, a white patch on black wings, and a call that sounds like a rusty farm gate opening, the Yellow-headed Blackbird demands your attention. Look for them in western and prairie wetlands, where they nest in reeds directly over the water. They're just as impressive in winter, when huge flocks seem to roll across farm fields. Each bird gleans seeds from the ground, then leapfrogs over its flock mates to the front edge of the ever-advancing troupe.

<u>Species Richness</u>: NO SUBSPECIES <u>Population Dynamic</u>: CHECK THREATS

Evolution and Systematics:

Evolution: Late Pleistocene (Rancholabrean North American Land Mammal Age, <400,000 yr before present [ybp]) and Holocene (10,000 ybp) records from California, New Mexico, and Utah.

<u>Systematics</u>: Clinal increase in body size from south and east to north and west within breeding range. Genetic variation, although significant, insufficient to identify subpopulations within the northern Great Plains population.

<u>Number of Species</u>: NO SUBSPECIES <u>Number of Genera</u>: NO SUBSPECIES

Physical Characteristics:

<u>Size and Length</u>: Length: 8.3-10.2 in (21-26 cm) Weight: 1.6-3.5 oz (44-100 g)

Wingspan: 16.5-17.3 in (42-44 cm)

<u>Coloration</u>: Males are striking blackbirds with yellow heads and chests, and black bodies with prominent white patches at the bend of the wing. Females and immatures are brown instead of black, with duller yellow heads. Immature males show some white at the bend of the wing, while females don't.

<u>General Body Features</u>: Yellow-headed Blackbirds are fairly large blackbirds, with a stout body, a large head, and a long, conical bill.

<u>Special Features of the Body</u>: Female RWBs are brownish to drab in coloration which makes them difficult to be spotted when they are in their nests.

Special Features of the Head and Sensory Organs: NONE

<u>Dentition</u>: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: NONE

<u>Any Special Internal Anatomy</u>: Red-winged blackbirds often tend to build their nests at a height of one to two meters above water in order to save their eggs and fledglings from predation.

<u>Sexual Dimorphisms</u>: The adult male is mainly black with a yellow head and breast; they have a white wing patch sometimes only visible in flight. The adult female is mainly brown with a dull yellow throat and breast. Both genders resemble the respective genders of the smaller yellow-hooded blackbird of South America.

<u>Differences Between Juvenile Stage and Adult</u>: Forehead, crown, nape, hindneck, most auriculars, posterior malar region, and breast are buff, often flecked with darker feathers along the margins. Chin, throat, belly, undertail-coverts, and legs are paler, approaching white in some individuals. Middle of back more or less broadly pinkish cinnamon or buff.

Behavior:

<u>Diurnal, Nocturnal, or Crepuscular</u>: Diurnal

Activity: Males establish territories in deeper-water areas of marshes, often among cattails and bulrushes. Each breeding male attracts a harem of up to eight females that nest within his territory, which he defends from other males. This arrangement means that some males don't have any mates at all, particularly younger ones. Second-year males usually don't even secure a territory for themselves, and become "floaters" with no fixed place in the marsh. In some cases breeding birds forage only within their territory, but in other instances breeding is loosely colonial, with birds finding food outside of their own territories. Females defend a small area around the nest and frequently mate with males from neighboring territories when their own mate is absent. Yellow-headed Blackbirds seem to preferentially nest and forage near Forster's Terns when possible, cooperating with the terns to mob predators or give alarm calls. Yellow-headed Blackbirds displace smaller Red-winged Blackbirds and Marsh Wrens from prime nesting spots in a marsh. Their nest predators include gulls, magpies, Common Grackles, American Bitterns, American Coot, Marsh Wrens, rails, bull snakes, garter snakes, blue racers, mink, red foxes, raccoons, deer mice, and striped skunks.

Locomotion: Walks or occasionally hops short distances while foraging on ground or moving about wetland vegetation. Will climb up or slide down vegetation to attain suitable, stable perch. Slightly undulating, feathers pressed against the body, tail held out behind body. Not known to occur, but before flight skills acquired, young may "swim" short distances to vegetation if they fall into water.

<u>Communication and Perception</u>: Males sing a few musical notes followed by a screeching buzz, rather like a heavy door swinging on a very rusty metal hinge. They sing from cattails, bulrushes, fences, shrubs, or small trees in the morning and evening during the breeding season. Females make a chattering sound that may be considered a song.

<u>Home Range</u>: Males establish territories that are defended against other males. Breeding is characterized as being in grouped territories, when most of the food resources are obtained within the territory, or loosely colonial, when most food resources are obtained outside the territory. Many males, particularly second-year males, are "floaters" without established territories. Females defend a small area around the nest.

<u>Degree of Sociality</u>: Breeding facilitated by social interaction; isolated breeding territories are rare. Breeding colonies act as information exchange centers to enhance foraging; members of the colony locate productive foraging areas by following successful foragers, especially neighbors.

Level of Aggression: Head Forward, boundary displays, Song Spreads, or Supplanting Flights may engender territorial fights during which males peck and grasp each other's plumage and roll about on the ground. During aerial fights at territorial boundaries, combatants fly up face-to-face and strike at each other with bill and feet. Fights seldom result in serious injury. During the breeding season, females respond to experimentally introduced female mounts, but aggressive behavior occurred in only about 8% of trials. Females were least aggressive during the laying stage and most aggressive during the nestling stage.

Migration: Medium-distance migrant. In the fall, populations that breed in the Canadian prairies migrate southeast and then due south across the United States to wintering grounds in the Southwest and throughout Mexico. Males tend to winter farther north, while more females migrate all the way to the species' southern limits. Yellow-headed Blackbirds migrate during the day in long and irregular flocks, gathering for the night at wetlands and roosting with other blackbird species.

Predators:

<u>Predators</u>: Marsh Wrens, American Bittern, American Coot, Rallidae, Bull Snake, Blue Racer, Mink, Red Fox, Raccoon, Deer Mouse, Striped Skunk, Owls, Harriers.

<u>Anti-Predator Defenses</u>: Hawk Alarm Calls given in response to avian predators, which stimulate others to join in call and initiate mobbing. An American Bittern was severely attacked by mobbing females and sought refuge among wetland vegetation.

Diet and Nutrition:

<u>Adult Diet</u>: Yellow-headed Blackbirds eat mostly insects in summer and seeds the rest of the year. They catch aquatic insects at the water's surface, including beetles, grasshoppers, dragonflies, caterpillars, flies, ants, and spiders. Outside of the breeding season they forage in uplands, eating grains and weed seeds. They form "rolling" flocks in farm fields, with individuals continually taking flight at the rear of the flock and landing at the front lines to feed. After establishing a foraging site, a flock will return to the same area repeatedly for several days. The blackbirds probe into soft ground and spread their bills to open up leaf sheaths or enlarge holes. They also flip over stones to unearth food.

<u>Juvenile Diet</u>: Invertebrates, particularly emergent aquatic insects, constitute the bulk of nestlings' diet. Emergent Odonates represent 60–90% of the diet of nestlings in Washington, with the remainder composed of Gastropoda, Hydracharina, Diptera, Orthoptera, and Arachnida. On 6 lakes in Washington, 12–20 different prey items were taken; in all cases, > 80% of food items were aquatic prey.

<u>Special Adaptations for Getting Prey</u>: Large foraging flocks "roll" over agricultural fields gleaning weed seeds and grains. The rolling appearance results when birds from the rear of the flock fly over the birds foraging on the ground and land at the vanguard of the advancing flock. Unharvested grains are consumed by perching birds. Unripened grains may be "milked" from hull. Sunflower is hulled before consumption. Food location is assisted by "gaping" (opening bill forcibly against resistance). Gaping is used to open leaf sheathes and probe small cavities. Small stones are flipped over by upward head movement.

Reproduction:

Mode of Reproduction: Polygynous

<u>Mating System</u>: Polygynous: generally 1-6 females within a harem. On 3 lakes in Washington, with 8–10 male territories on each, the mean number of females per territory varied from 1.7 to 4.2.

Mating Season: April to June

<u>Courtship</u>: Sexual chasing is common during the breeding season. Males, with contour feathers sleeked, chase females using deep, rapid wingbeats to attain maximum speed. Males overtake rapidly flying females in mid-flight and use their bills to grasp the female's rump. The pair may then fall into the vegetation and the hold is released. The female is silent during the chase, whereas males emit Chuck-uck Calls and muted Hawk Alarm Calls.

Territoriality: HOME RANGE

<u>Mating</u>: During copulation, the male's feathers are sleeked, and he maintains his balance on the female's back with rapid wing movements. Males usually mount repeatedly before copulation is successful, and multiple successive copulations may occur. In postcopulatory displays, males may again Crouch before successive copulations, they may engage in flight displays, or more commonly they adopt a Raised Tail Display. Tail is held nearly vertically erect, exposing the yellow feathers around the cloaca.

<u>Nest Placement</u>: The female chooses a nest site within a male's territory, always picking a spot that overhangs the water. She affixes the nest to live or dead vegetation—usually cattails, bulrushes, or reeds, but sometimes willows, tamarisk, or wild rice.

Nest Description: The female builds the nest by herself. She weaves long strands of wet vegetation, collected from the surface of the water, around 4–5 upright stems. She adds more strands and more supports, and then an outer wall and an inner cup of the same materials. The outside of the nest is 5–6 inches across and about the same height, while the inside measures about 3 inches across and 2.5 inches deep.

Egg-Laying: Clutch Size: 2-5 eggs Number of Broods: 1 brood Egg Length: 0.9-1.1 in (2.3-2.8 cm) Egg Width: 0.7-0.8 in (1.7-1.9 cm) Incubation Period: 12-13 days Nestling Period: 7-14 days Egg Description: Grayish to greenish white, splotched with brown, rufous, and pearl gray.

<u>Hatching and Incubation/Gestation</u>: Helpless, with eyes closed. Nestlings have pink skin covered with patches of tawny down, and their mouths are bright red and pink.

<u>Development</u>: Altricial. Sex ratio at hatching is 1:1. Yellowish pink to salmon pink in color at hatching. Sides of the gape are scarlet red, roof of mouth and tip of tongue are bright red, and remainder of gape is pink, which contrasts with the yellowish white corners that protrude beyond the sides of the head. Bill is brownish, egg tooth white. Bulging eyes are closed, covered with gray-blue skin.

<u>Parental Care</u>: Young beg for food soon after hatching. They are fed from 1 d old and continue to be fed until they develop flight skills. Females feed young in nest. Males assist in feeding after young are about 4 d old but almost exclusively at primary nests. Males may also feed young in secondary nests, particularly if number of young in primary nest is reduced. Food items are brought to the nest by adult. Begging of young stimulates adult to feed young.

Lifespan: Up to 12 years.

Conservation:

<u>Official Federal Status</u>: Least Concern <u>Special Statuses in Individual States</u>: NONE

<u>Threats</u>: Yellow-headed Blackbirds are numerous and their populations are relatively stable in the long term, though they fluctuate considerably from year to year depending on wetland conditions, rainfall, and droughts. The North American Breeding Bird Survey found that this species may have experienced a small decline between 1966 and 2014. Partners in Flight estimates a global breeding population of 11 million with 85% spending some part of the year in the U.S., 75% in Mexico, and 15% breeding in Canada. This U.S.-Canada Stewardship species rates a 9 out of 20 on the Continental Concern Score and is not on the 2014 State of the Birds Watch List.. Yellow-headed Blackbirds appear to be in no danger as long as their habitat remains intact. But because they breed only in wetlands, drainage projects can be a threat (though it tends to affect shallower wetlands more than the deeper-water, bigger wetlands where these blackbirds tend to nest). On the other

hand, new fields of corn, sunflower, and small grains have created a vast food supply for the birds outside of the breeding season, probably increasingly the survival rate of fledged young. Because of their diet and habitat choice, Yellow-headed Blackbirds can suffer from exposure to herbicides and pesticides, such as when herbicides are used to reduce wetland vegetation, when the birds eat insects or grain treated or crop-dusted with pesticides, or when farmers use toxic baits or sprays directly against the Yellow-headed Blackbirds themselves. Measures taken to protect crops also include trapping, netting, shooting, and hazing the birds with aircraft.

Conservation Efforts: ^^^^^

Extra Facts:

- 1. The Yellow-headed Blackbird often nests in the same marsh as the Red-winged Blackbird. The larger Yellow-headed Blackbird is dominant to the Red-winged Blackbird, and displaces the smaller blackbird from the prime nesting spots. The Yellow-headed Blackbird is strongly aggressive toward Marsh Wrens too, probably because of the egg-destroying habits of the wrens. When the Yellow-headed Blackbird finishes breeding and leaves the marsh, Marsh Wrens expand into former blackbird territories.
- 2. The male Yellow-headed Blackbird defends a small territory of prime nesting reeds. He may attract up to eight females to nest within his area. The male helps feed nestlings, but usually only in the first nest established in his territory. The other females have to feed their young all by themselves.
- 3. In 1825 Charles Lucien Bonaparte, nephew of Napoleon Bonaparte, gave the first detailed description of the Yellow-headed Blackbird, which was collected in 1820 by Thomas Say and Sir John Richardson.
- 4. Because Yellow-headed Blackbirds always build their nests over the water, nestlings sometimes fall in and have to swim short distances to vegetation.
- 5. Pleistocene fossils of Yellow-headed Blackbirds (from 100,000 years ago) have been dug up in California, New Mexico, and Utah.
- 6. The Yellow-headed Blackbird's scientific name, Xanthocephalus, means "yellow head."
- 7. The oldest Yellow-headed Blackbird on record was at least 11 years, 8 months old. It had been banded in Saskatchewan and was found in Nebraska.

Notable Species: NONE