# CENTER LINE

A Publication of Waukesha County's Retzer Nature Center


## Fall 2008

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# A GREEN VENUE

Early American Indians called them "black hawks." First English colonists named them buzzards, which was a correct term for one family of hawks. For years the birds were believed to be raptors (birds of prey), or members of the (Falconiformes). Recently, however, it was discovered by biologists, that this bird shared a common ancestry with storks and ibises. Since 1994, just in case you're interested, the birds were recognized (through DNA testing) to be Ciconiiformes, in the family Cathartidae. They are now called New World Vultures. *Cathartes aura* is the put-upon creature's name at this time. Commonly called the Turkey Vulture – they have certainly circled a long way, baby!

Eagle-sized and cloaked in dark hues addresses the Turkey Vulture. Body of the bird reaches 25-32 inches in length and when fully grown it weighs in around six pounds – comparable the weight of a human newborn. Wing plumage is dark brown to black. When the bird is in flight, the trailing half of the wing appears silver. When mature the wingspan can reach six feet, and the flight patterns of a soaring Turkey Vulture become spellbinding. No other bird in North America is more graceful in flight. This vulture is also the most skilled of the gliders in the territory. Using their skills, they can soar at very high altitudes for hours without flapping their wings – at times for six or seven hours on end. After the sun has warmed the morning air, necessary flaps of the wings are used to facilitate take-offs from their perches. The vultures circle upward, searching for pockets of rising air (thermals), then allow the thermal to lift them upward in a circular motion. When reaching the top of the thermal, they dive across the sky, sometimes reaching speeds of 60 miles an hour, losing altitude until they find another thermal, to repeat the process. All of this traveling without one flap of energy.

Two bits of interest in the vultures' flight plans:

1. Turkey vultures fly with their wings in a dihedral angle, or V shape.
2. Circling vultures airborne are called a "kettle."

Eventually, the most skilled of gliders will have to come down to earth. Beauty of the winged bird soaring is momentarily forgotten when coming face to face with the pilot. Earthy features of the turkey vulture's head – not flattering. In fact, ugly has a whole new meaning. The bird has a tiny, bald head with some few bits of fuzz on the top. Its small head is wrinkled and cast in striking-red, with flaring nostrils of the same shade. The expression culminates with the white sharp-hooked beak. Two beady-black eyes scrutinize the habitat.

(A Green Venue... continued)

Two extra bits of interest in the vultures' makeup:

1. Although the vulture has poor night vision, during daylight hours eyesight is excellent.
2. A group of vultures is called a "venue."

The more foraging done for *Catharites aura* material, the more fascinating *Cathartes aura* became. The New World Vultures have been around since prehistoric times, and ugly as they may be, male and female are exact look-a-likes. Oddly enough, and to their credit, the big black birds (with their bald red heads) have always been green. A Turkey Vulture is born with all the accoutrements to be nature's ultimate scavenger and recycler.

With closer glances at the turkey vulture, you will find that they are gentle and non-aggressive. They do not prey on living animals, but exist on animals that have died from disease or natural causes, or happen to be road-kill from modern day accidents. The turkey vulture has the best sense of smell of the American vultures, and they are attracted to the smell of mercaptan-which is a gas produced by the beginnings of decay. They are lucky in that they can eat rotten, diseased carcass and not ever get sick. The lucky birds help the ecosystem by cleaning disease out of our environment. Their digestive cleansing process may someday prove valuable to medical science. Scientists estimate a vulture can eat 111 pounds of carrion in one year. Meats well digested. At times, however, they will eat a side dish, of leaves or grass, pumpkins or seeds, if a meaty dish is scarce.

Clean-up teams are happy campers in the field. Love nests for two are built in state-of-the-art style GREEN—simple, well located, and environmentally sound. Females will deposit one to three eggs in a scratched out indentation of soil, or in a hollow log, or crevice. Eggs are white with dark-brown spots. Both parents share in the duties of incubation and in the feeding of their brood. When hatched, the young'uns are covered in pure white down. And ugly is still a working adjective. Night finds the venue returning to communal roosts in deciduous forests or woodlands, that border open fields or farmlands.

Two ugly facts on Turkey Vulture habits:

1. The turkey vulture urinates on its legs to keep cool in the summertime. Vultures cannot sweat and the urine is cooling as it evaporates.
2. The uric acid of this vulture is so strong that vulture scat becomes a sanitizer.

Although the turkey vulture is a gentle creature, there are times when it is threatened. Primary form of defense is vomiting. By coughing up lumps of semi-digested food, so foul smelling, any creature intent on raiding the vulture's space will gratefully back off. The vomit smell is so obnoxious, and if the perpetrator gets vomit in the face or eyes, sting from it quickly alters intentions. To protect their nests, the non-confronting birds will sometimes play dead, and a predator better be wary when approaching any nest, because both parents and kids, will vomit over intruders with their battery of organic stink bombs. Like owls, vultures will also regurgitate pellets of indigestible bone and fur. Pellets are oval shaped, grey or brown in color, and as with owls, the pellets can be found under roosting areas. Indigestible materials will be absorbed into the soil to become an earthly asset rather than an air pollutant.

*Cathartes aura* is a working model for today's green concept. Our model sometimes poses in a spread-winged posture called the "horaltic pose." In this stance, the vulture dries his wings, heats his body, and bakes the bacteria on his skin, cleaning up carrion in the environment. Going to and from his life's work, the vultures are helpful in cutting down noise pollution. Nature played a hand in this, however, because the turkey vulture is not endowed with a syrinx, which is a bird's voice box. Silent for the most part, hisses are used when the bird feels threatened, and grunts are uttered during the excitement of courtship. The kids do a lot of grunting, too, when they want to be fed, but that's the way it is in most families!

See you on the trail,

*Shirley Blanchard*

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# The Conscience of Conservation

Not one to be humble in his aspirations, the charismatic American naturalist and bird painter John James Audubon (1785-1851) had a goal suited to his exuberance and high energy—to paint every single bird species native to North America. This Herculean effort eventually produced 435 paintings, showing over 1000 birds in life-size splendor. Engraved, hand-colored plates were created from the original paintings, and sets of these were sold in serial format to subscribers during the 1820s and 1830s. This collection, known as Audubon's *Birds of America*, is considered to be the greatest work of North American ornithology ever published. The original paintings are now safely in the hands of the New York Historical Society, but only about 120 sets of the plates engraved from them are still in existence.

Like any great work of art, Audubon's masterwork benefited in its time from advocacy in high places. Specifically, Audubon had contacted the renowned British botanist John Stevens Henslow of Cambridge University, with the request that Henslow convince the University to subscribe to *Birds of America*—a move which would help to guarantee acceptance of the work by the British elite. It was the famously persuasive Professor Henslow who had arranged for Charles Darwin to take the position of expedition naturalist on the ship H.M.S. Beagle—just in time for the Beagle's famous voyage to the Galapagos Islands...which culminated in Darwin's earth-shaking work *The Origin of Species*! As expected, Professor Henslow was successful in persuading Cambridge to subscribe to Birds of America (no doubt a feather in Audubon's cap). Audubon was appropriately grateful, and he showed his gratitude by naming a bird species after Professor Henslow—specifically, *Ammodramus henslowii* (the subject of *Birds of America* painting #412), known thereafter as Henslow's Sparrow (by the way, "sparrow" is based on the Anglo-Saxon word for "flutterer", and *Ammodramus* is Greek for "sand runner"—both appropriately descriptive terms, to offset the rather un-scientific inclusion of Henslow's name). It is unlikely that Professor Henslow had ever laid eyes on a Henslow's Sparrow before, but Audubon (who shot birds, so that he could paint them) no doubt had a few of the sparrows lying around—and he would most likely have sent one to the Professor, who no doubt was proud to receive it.

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The reclusive Henslow's Sparrow is a bird of the primeval long-grass prairies of the upper Midwest, hiding in the deep grassy cover and feeding on insects, other small invertebrates, and seeds. The bird is small and dark, about 5 inches long, with a large beak and a short, pointy tail. The short, stubby wings are marked with reddish brown, and they contrast with the olive green head, which is flat, comparatively large, and modestly adorned with dark cheek marks and a striped crown. The chest and sides are finely streaked with black. The bird's style of activity makes a good fit for its humble appearance, and its surroundings, as it moves in secretive fashion—running like a mouse through the long grass. Overall, it gives the impression of a prairie mouse, re-incarnated as a bird. The song of the Henslow's Sparrow (such as it is) arises insect-like from the background of prairie crickets and grasshoppers, and is delivered with what appears to be the utmost effort (the bird throwing its head back and straining mightily, as it attempts to vocalize); what emerges is a disappointing, desiccated "tsilick'"—sort of like the beginning of a grasshopper's song.

The Henslow's Sparrow breeds in loose colonies in suitable grassland habitat, with the male birds patrolling (and singing in) territories of at least an acre in size (though these territories may have rather inexact boundaries). The males often sing on quiet nights (this, from personal experience, is an oddly spooky

addition to the prairie darkness). The male courts the female by hopping on the ground, singing and fluttering his wings in the direction of a likely nest site—all done while holding some nesting material in his beak, in an appealing manner. If the female takes the hint, she commences building a three-inch diameter cup-shaped nest (all in about five days, without any help from the male), using grass and other plant materials. The nest is located either on or near the ground, hidden by the grass overhead (which may form a sort of roof). Occasionally, the nest might be elevated, and attached to the vertical grass stems (and lacking a roof). This nest is eventually occupied by 3-5 eggs, each about ¾" long, creamy to greenish-white, and marked with brown (often wreathing the large end). Incubated mostly by the female (who runs, mouse-like, through the grass if disturbed), the eggs hatch in about 11 days. The young are cared for in the nest (by both parents!), and are fed insects; they leave the nest about 10 days after hatching. Two broods of young can be raised each year, if suitable habitat conditions persist.

Photo taken by Terry Molter of Retzer Camera Club

The range of the Henslow's Sparrow is almost completely contained within the United States, east of the Rocky Mountains—the bird spends the winter in the far southeastern US, and the summer across grassland areas of the upper Midwest, mid-Atlantic, and New England states. As the tallgrass prairie was converted to agriculture during the 19th Century, the sparrow adapted to habitat change—moving into tall, dense fields and meadows (especially those with high moisture and dense litter), and tall un-mowed hayfields (which it would abandon if and when the hay was cut). Henslow's Sparrow became known as an "area sensitive" species, requiring a large area of contiguous, un-fragmented tall grassland habitat ("grassland interior"), and intolerant of brushy "edge" conditions.

Although clearing of forests had allowed the species to expand its range, the usable habitat was sharply reduced during the 20th Century—due to drainage of wetlands, intensive agriculture, and adoption by most farmers of an earlier cutting schedule for hayfields. All this has resulted in a profound reduction in the population of Henslow's Sparrow throughout its range—to the point where it is now officially listed as a threatened species in a number of states, including Wisconsin, Minnesota, Michigan, and Illinois. Specifically, Wisconsin DNR rates the Henslow's Sparrow as the top species of management concern among all grassland birds in Wisconsin (based on criteria such as range size, abundance, and threats to its habitat). It also appears on the National Audubon Society's "Blue List" of North American bird species undergoing reduction in population and range. The Federal Breeding Bird Survey showed a population decline for the species of nearly 4% per year, from 1964-1996. In Wisconsin, the annual probability of sighting the species is now only about 10%.

The plight of the Henslow's Sparrow is emblematic of very many non-spectacular native plant and animal species that have had a place, a niche, in the pre-settlement natural community. Taken together, these ordinary, everyday species represent the fabric of the natural community—their presence, and their interactions with one another, are the diversity, resiliency, and stability of the natural community. As the community has been modified by human activity, such a species may have struggled, and to some extent adapted to change. But now, as the pace and extent of change increases, the species is unable to adapt and gets left behind. It is obvious that without specific energy devoted to its maintenance, such a species will become a memory—and when this happens, the community it is part of will be simplified, and rendered less stable, less resilient to future change.

The conservation of a species such as the Henslow's Sparrow does not just represent a sentimental effort to save a relic from the good old days. It isn't just a good-hearted attempt to rescue an old friend. It is indeed much, much more than that. Such conservation is a recognition of Aldo Leopold's insight that;

> "The land is one organism. ... The last word in ignorance is the man who says of an animal or plant: 'what good is it?' If the land mechanism as a whole is good, then every part is good, whether we understand it or not. If the biota, in the course of aeons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering. Have we learned this first principle of conservation: to preserve all the parts of the land mechanism? No, because even the scientist does not yet recognize all of them." (Aldo Leopold, 1949, *A Sand County Almanac)*

This famous passage (often misquoted) holds just the right sense of humility, just the right willingness to accord value and importance to the land and its creatures—apart from our ability to use them or be impressed by them. It speaks not of the conservation of individual species (which is easy for people to get excited about when the species are spectacular Bald Eagles, or Timber Wolves, or Grizzly Bears—but maybe not so easy when the species are humble citizens like the Henslow's Sparrow). It speaks instead of conservation of the land itself, on its own terms—including all the little-known or unknown species that are part and parcel of a healthy and whole land system. This would appear to involve a certain stepping-down from our accustomed position of land-emperor—allowing us to embrace conservation that is not done just for self-interest, or for profit.

An ideal breeding habitat for Henslow's Sparrows would include relatively tall residual cover in spring (at the beginning of the nesting season), with summer mowing delayed till July 15th or after (giving the nestlings sufficient time to mature), and with late season mowing restricted so as to allow for sufficient re-growth of vegetation in late summer/fall—to provide residual cover for the following spring.

The conservation of this kind of breeding habitat in the midst of agriculture and other intensive land use (or development) would involve the preservation of sufficiently large areas of grassland, so that open mowing (early, repeated, or late) can be done on some parcels, while other parcels (of at least 75 acres total area) would have restricted mowing (as above)—to maintain the needed tall grass habitat for the needed time period, in a sufficiently large area. The open mowing areas and restricted mowing areas could be rotated from year to year. And whenever the grass fields and hayfields are cut, the best practice is always to access the center of the field first, and mow in a gradually centrifugal direction (from inside to outside)—allowing young birds an escape route to the outside, rather than trapping them in the middle of the field.

Implementing this sort of thing obviously involves a sacrifice. It foregoes a certain convenience, and a certain amount of short-term income, in the interest of preserving a level of wildness and authenticity of habitat. It moves us away from our narrow self-interest, and allows for other rights and values. What is gained is obviously the specific survival of humble species with particular requirements, such as the Henslow's Sparrow. But what is also gained, less-obviously, is a different balance point between our interests and the intrinsic integrity of the land. The land's carrying capacity for use by us is re-defined, with a higher value for open space, a higher value for land working in a natural way—and it lets us see what the pattern of our use of such land would look like...with the land less crowded, less stressed, more able to heal itself, more able to build soil, more able to harbor birds and wildlife. Perhaps conserving land so as to take care of "the least of these" (such as the Henslow's Sparrow) allows the emergence of a new paradigm for healthier land—which would be in the long-term best interest of all the land's inhabitants, human and non-human alike.

Retzer Nature Center has proceeded with the establishment of an area of contiguous grassland, including restored prairie, managed hayfield, and grassy old field. In this area, we have done progressive reduction and elimination of brushy fence-rows, to increase unbroken "grassland interior" conditions. The combined area of this grassland complex is now about 60 acres, and includes our southeast hayfield (the "Bobolink Field", which was the subject of articles in this newsletter back in Spring 1997 and Spring 1998) and its surrounding fields and prairies—all of which have progressively improved as habitat for an increasing variety of grassland bird species—including the Bobolink, Savanna Sparrow, Clay-colored Sparrow, Grasshopper Sparrow, Eastern Meadowlark, Upland Sandpiper, and Northern Harrier, among others. Though Henslow's Sparrows were occasionally sighted in the hayfield in times past, for the last couple years now they appear to be nesting. This year, three separate males are singing in different distinct locations in the hayfield—they appear to show fidelity to these locations, and I happily infer that their presence is not just a passing visit.

We have adopted a policy of no cutting in the southeast hayfield until after July 15th, thanks to the cooperative participation of our friend and neighbor, the farmer, who cuts the hay for us. As for the future, who can say? Perhaps this simple decision will help the hayfield re-discover an old balance not seen there since the days of the

buffalo. Perhaps the humble and lowly Henslow's Sparrow will, in its way, help in that discovery—and help to make the old balance new.

*Larry*

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...and field experience of the author.


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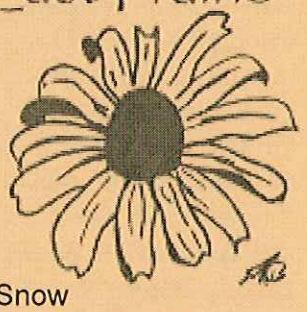
## *A Sincere Thanks to All...*

The following individuals or groups have donated to Retzer Nature Center since the last issue of CENTER LINE. Their support is greatly appreciated.

- Cash donation from Thresa Bartelt
- Cash donation from Charlotte Krygier
- Gregory Harmon for donation of cold frame for Natural Landscaping Department
- Cash donation from Kyla & Robert Orsinger in remembrance of Robert Huebner





# DEE DAY

Our story begins with a young couple, entering their first winter after raising a family of commendable size. Snow is falling this early morning, filling the air with descending patterns of whiteness. Few reach the protected pair deep in their fortress of evergreens, although the upper boughs now bend like a fully-drawn longbow. The copse is quiet, the peace absolute.

A few flakes fly as the two monochrome puffballs shake off the nocturnal torpor, trying to raise their body temperatures for the day ahead. They are already anticipating a breakfast of berries. They know of numerous locations with a few types of tasty berries each. This is vital knowledge on more than one level. One must eat heartily in the cold weather and everybody knows breakfast must include berries. If there are no berries to be had, it almost isn't worth breaking your fast... almost. Thinking of berries, the little male nudged his mate.

"Early bird gets the" he started, way too cheerily.
"...worm?!" she cut in, "I'm up for an early breakfast as long as you don't use silly clichés. Besides, we aren't even that into worms when it's warm. What now, wormcicles? Gross."
"Deal," he conceded, "but we should eat all we can while we can. Our boreal cousins are visiting this year."
She cocked her head. "You mean the Brownies?"
"Who else?" The little bird bristled at the buzz name. His partner didn't seem upset in the slightest. "I've half a mind to fly north a few-hundred miles and enjoy one of their winters, laughing all the way." he said.
"Half a mind is all you ever had if you're actually considering such a journey." Her tone was both amused and serious. "Settle down and remember... if they're really so tough, why aren't they up there now? They aren't bad birds and it's nice to have company. And don't forget, not all of us stay put for the winter."
"Hmmph!"

Although young with much to learn, he was already an old-fashioned bird complete with opinions, set ways and routines. He and his mate had heard about the occasional invasions from the north. The last one

was 5 years ago and nearly forgotten by everybody. Last year, he would have welcomed the company but now they had a family of their own and he was worried about food. There should be plenty, but taking that for granted lost you feathers fast! He really wasn't as upset as he sounded, and he did like his cousins; it's only that he liked things 'just so'. Also, they had to put up with the brown plumage. These birds were so proud of their brown! His Black-capped companion waited patiently for him to continue.

"I don't mean to be selfish," he said after the long pause, "It's only... it's just..." He stopped himself after each attempt to begin. His mate already knew everything he could conjure up as a feeble, selfish explanation. She simply had more faith in the grand design.
"It's just the way things are." She finished for him. "And... it's wonderful. So quit your worrying and fretting. We Chickadees are supposed to be the friendliest birds around, so let's start acting like it and go perch on someone's hat!"

The male bird burst into song in spite of himself. Only one year's time and she could crack his composure despite his best efforts or worst moods (Chickadees, of course, were rarely in a bad mood but it did happen). Her affection for humans always amused him. Not that there were many opportunities to perch on hats, but there was this one fellow with a notepad who just bought the nearby sand farm...

The Black-capped Chickadee (*Parus atricapillus*) is a well-known bird in our area throughout the entire year. It may seem redundant and even ridiculous to write about such a well-known bird but there may be a few things you don't know. The first thing we should deal with is their vocalizations. Their most well-known "Chick-a-dee-dee-dee" is not their song at all, it is their 'call'. Bird Calls can be heard year-round and serve a number of purposes, including announcing threats or alarms. Some birds (like our Chickadees) seem to just like talking for the fun of it. Bird Songs are centered around mating and territory defense. Mostly, they are heard only during the breeding season. A Black-capped Chickadee's song is a two-note whistle; the second note lower in pitch. We won't even get into what some ornithologists call secondary songs but beware, Chickadees, even more than most other birds have other chips, chirps and cheeps. Learn to identify them by these, by their voice, and amaze those who think they know this little bird so well.

Chickadees normally pair up in fall and remain in pairs as part of the winter flock (Kaufman 1996). These winter flocks may occasionally move south en masse, making this species at least "partly migratory" (Robbins 1991). Mostly they just shift a bit to the south, never going too far. To help with the winter temperatures, they eat 10-20 times more per day than in the summer. Their winter diet consists of about half insect larvae and spiders and half seeds and berries, compared to about a 90% animal diet (mostly caterpillars) in the summer. When resting, their body temperature may drop up to 20 degrees to save energy. During very windy winter days, you will likely only find them deep in a well-protected and sheltered conifer copse, waiting out the wind with their feathers fluffed up for warmth (Leopold 1949).

When spring comes, both members of a pair help defend their chosen breeding territory, preferably in mixed or deciduous woods. Chickadees are cavity-nesters and will excavate a hole together, use an old woodpecker hole and will even nest in a human-made box (rarely). At about 5-20 feet off the ground, the female lines the cavity with moss and something softer, like hair). The first eggs come sometime in early May. The female incubates with the male bringing at least part of her food to her (Kaufman 1996). Chickadees are normally single-brooded but new eggs have been found as late as July, suggesting some pairs may attempt a second clutch. The young hatch in about two weeks and leave the nest in about another two weeks (Cutright et. al. 2006).

Chances are you already have these birds in your area, but if you want to make things better for them you can plant Serviceberries, Birches, Sunflowers, Winterberries, Pines, Spruces, Hemlocks, Cedars and Viburnums (Adams 1994). Birdfeeders are also a great way to bring Chickadees in. If you feed in the winter, make certain you keep that feeder full all the time or you are going to make life difficult (even impossible) for your feathered friends.

(Continued on page 8)

**RETZER NATURE CENTER**
WAUKESHA COUNTY PARKS & LAND USE
S14 W28167 MADISON STREET
WAUKESHA, WI 53188

**Return Service Requested**

(Dee Day... continued)

With some birds, "feathered friends" might be a little presumptuous. Not with our tough-as-nails-yet-friendly Black-capped Chickadee. Ever curious, many things about this animal exude a lovable contrast as distinct as it's stark, black and white markings. This bird is as common as they come and is as uncommon as can be. I, for one, wouldn't have it any other way.

*Mike*

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