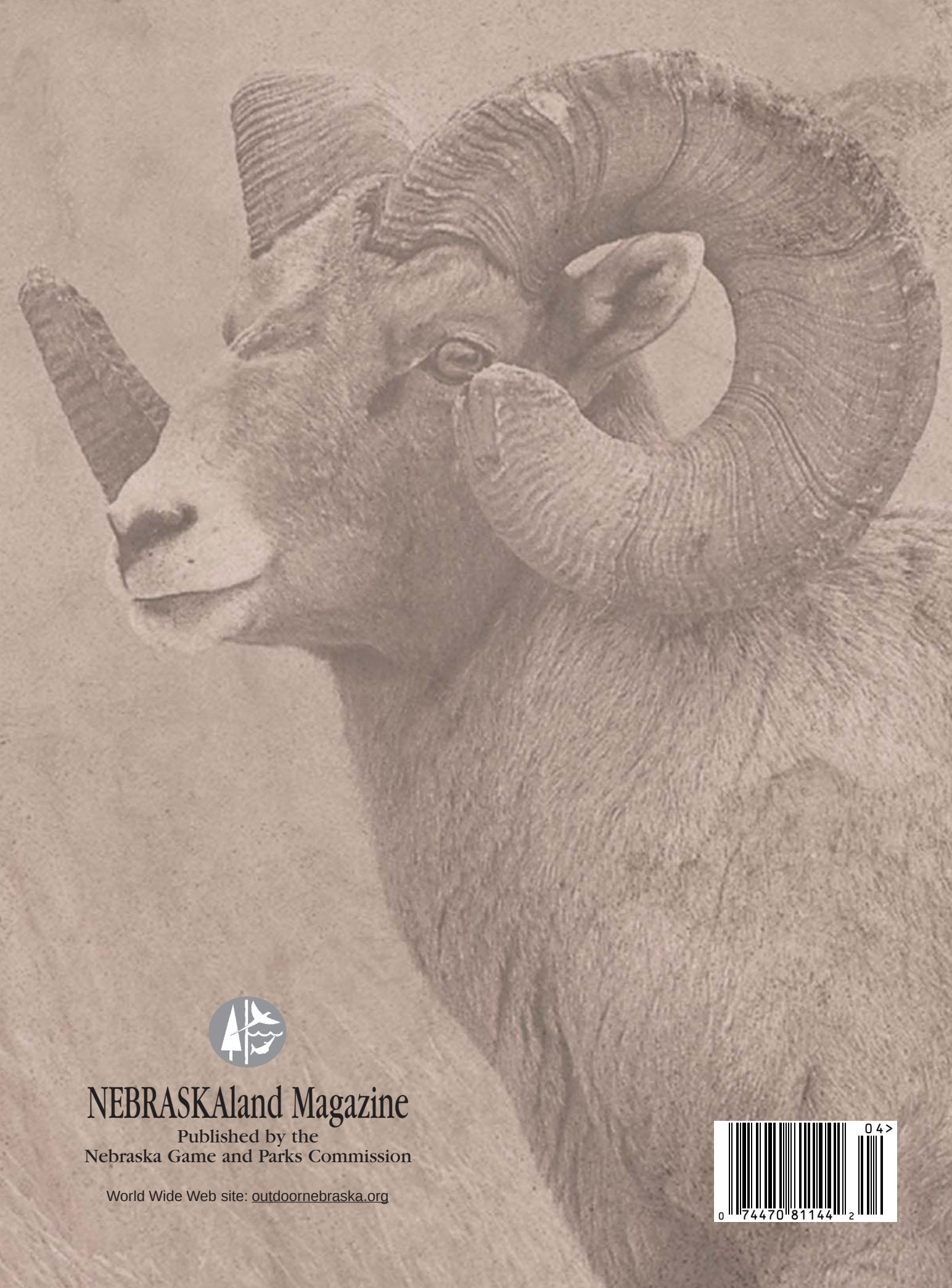




NEBRASKAland Magazine

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Volume 82, Number 3, April 2004

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Cover: Eloise Johnson and Carmen Frickenstein fish for trout in Verdigre Creek in Antelope County. Photo by Eric Fowler. **Opposite:** With redbud in bloom in April, a female eastern fox squirrel stands alert at the nest cavity that holds her young in Lancaster County. Photo by Michael Forsberg.



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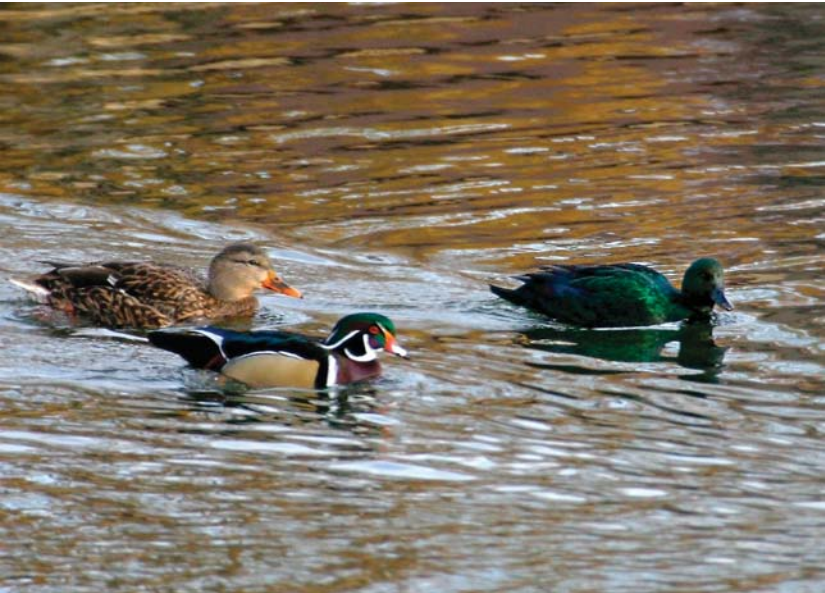


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A duck with iridescent green plumage (right) swims with a male wood duck (center) and a female mallard in the Cedar River.

Mysterious Duck on Cedar River
I took this interesting photo last fall while I was bowhunting on the Cedar River. When I go bowhunting, I always take my camera because you never know when you will see the unexpected. Well, this scene was unexpected. I cannot identify this green duck. I have hunted ducks for eight years and I have been a birdwatcher my whole life and I have never seen a species like this one.

I've looked in my bird books and asked different people about it, but I have yet to figure it out. Maybe it's a joke and it's a farm duck. But I think it is odd that a farm duck would be with a drake wood duck and hen mallard in the wild. The closest farmhouse to where I hunt deer and took this photo is about five miles away. So these birds are definitely in the wild.

Can you identify it?
Brent Werts
St. Edward, Nebraska

The photograph puzzled a number of bird and hunting experts at the Nebraska Game and Parks Commission, too. After closely examining the image, Paul Johnsgard, an ornithologist with the

University of Nebraska-Lincoln, wrote, "I believe it is an East Indian duck, a small breed of domestic mallard that has overall dark green plumage iridescence in both sexes. I think it is a female, as the tail lacks a curl. It is an old European breed that flies well and could easily mix with wild ducks."

Birding Issue "Great Production"
The January-February issue of your magazine, *Birding Nebraska*, is a great production. I am pleased with myself that I have been a regular subscriber to your magazine for years. I would hate to miss this issue. I am sure that many hours of work went into this production and that all members of your staff had contributions. You used sources of information not always readily available but with perseverance were able to put everything together. I have always been a lover of animals and that includes birds. Martin Dunklau
Omaha, Nebraska

Pioneers Park a Birding Spot, Too
The staff of Pioneers Park Nature Center was pleased to receive the beautiful and useful January-February issue *NEBRASKAland*,

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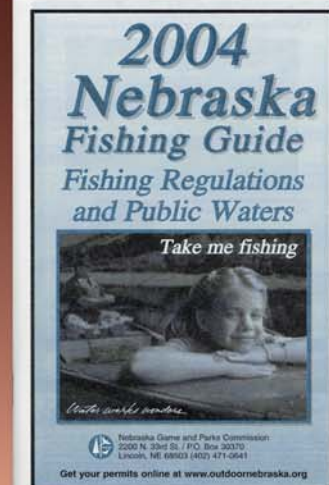
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Birding Nebraska. However, we were distressed to find that the nature center was not mentioned. The nature center has been a birding destination since it was dedicated as the Chet Ager Bird and Wildlife Nature Study Center in 1963. Our published bird list includes 245 species that are attracted by our 400 acres of prairie, woodlands, ponds, wetlands and stream. Our bird garden was established in 1970 and is visited regularly by both the public and university ornithology classes. Our staff feels that our facility is as worthy to be included as Fontenelle Forest, Spring Creek Prairie, or the other wonderful sites you covered in your publication. Becky Seth
Lincoln, Nebraska

It's Colombia, South America
I very much enjoyed the story "A Common Bond" in the March issue of *NEBRASKAland Magazine*. I noticed, however, that Cristobal Alvarez's birth country, Colombia, was misspelled. I believe this is not an unusual mistake. We see names like Christopher Columbus, the Columbia River, British Columbia and Columbus, Nebraska, spelled with the letter "u" in the second syllable. Colombia, South America, however is spelled with the letter "o."
I would enjoy reading more stories of cultural exchange in the magazine. Mary Minturn
Omaha, Nebraska

We apologize for our spelling error. – Editor

Comment
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Nebraska Game & Parks Commission

Pointing Dog Championship Held at Branched Oak WMA

The 2004 American Kennel Club National Pointing Breed Gun Dog Championships will be held at Branched Oak Wildlife Management Area northwest of Lincoln April 26 through May 5.

The event, sponsored by the Nebraska Field Trial Association, will draw up to 230 dogs and their trainers from across the country, and possibly a few from outside the United States. This is the third time the event has been held at the 880-acre dog-trial area located at Branched Oak.

Both retrieving and nonretrieving events will be open to ten breeds: German shorthaired pointer, German wirehaired pointer, Irish setter, vizsla, weimaraner, English setter, Gordon setter, English pointer, Brittany and pointing griffon. Awards will be given to the top dog in each breed, as well as the overall champion and the top amateur handler. Dogs will search for native and released pheasants, quail and chukars. Most dog handlers will work from horseback, but walking handlers also are permitted.

The event is open to dogs that have qualified in other AKC events, amateur field champions, open field champions and dogs that have placed in a recognized adult stake during the past two years.

Weather permitting, a gallery wagon will be available, allowing spectators to follow the action, which begins at 8 a.m. daily. For more information, contact Jean Armbrist at (402) 332-0777, Toot444@aol.com, or Tom Maneely at (402) 487-3328.

Disease and Drought Curb Deer Populations in West

Nebraska deer hunters have enjoyed an abundance of deer and permits since 1997, harvesting at least 52,000 deer in each of the past seven years. That bounty might subside for a while,



German shorthaired pointers, like the dog above, will be one of ten breeds working at the Nebraska event.

according to Kit Hams, big game program manager for the Nebraska Game and Parks Commission.

While the 2003 Nebraska deer harvest was only slightly below that of 2002, recent harvest data indicates that the combined effects of drought and hemorrhagic disease have caused significant declines in deer numbers in several western deer units.

"Our best estimate is that white-tailed deer populations have declined 36 to 49 percent in Calamus East, Calamus West, Keya Paha, Loup East, Loup West, Plains, Sandhills and Upper Platte deer management units due to hemorrhagic disease, and mule deer populations have declined 42 to 45 percent in both the Frenchman and Upper Platte units due to drought," said Hams. "While hunters can expect fewer deer, reduced antlerless opportunity and lower success rates in central and several western deer units in 2004, we're optimistic that deer populations will recover quickly."

Hemorrhagic disease primarily affects white-tailed deer and is caused by either epizootic hemorrhagic disease (EHD) or bluetongue virus, closely related diseases transmitted by biting midges. EHD, which does not affect humans, has caused mortality in Nebraska deer for many decades, Hams said, most often in

TOM KEITH

drought years. After a large outbreak of EHD, surviving deer often become immune to the virus and the population recovers quickly.

Sixty percent of Nebraska's deer population is in the eastern third of the state, which has been largely unaffected by drought or EHD. Hams said nearly all residents and most nonresidents should be able to get a 2004 deer permit in the unit of their choice. He also noted that the trophy potential of Nebraska bucks continues to improve as the average age increases. Fifty-nine percent of the 2003 deer harvest was adult bucks, he said, and 66 percent of mule deer bucks and 59 percent of white-tailed bucks were at least 2½ years old.

Total deer harvest for the 2003 seasons was 53,314 deer taken by 112,563 hunters. In 2002, 112,894 hunters took 53,624 deer. Firearm success in 2003 dropped one percent compared to 2002, with 82,541 firearm hunters harvesting 44,964 deer for a 54 percent success rate. Archery deer hunters matched 2002's 28 percent success rate, with 14,074 archers taking 3,959 deer in 2003. After a record low 25 percent success rate for muzzleloaders in 2002, 15,948 hunters harvested 4,391 deer in 2003 for a 28 percent success.

Permit quotas and regulations for the 2004 deer season were set at the Commission's March meeting in Lincoln. For information about the 2004 Big Game Guide, available from permit vendors and Commission offices across the state and online at outdoornebraska.org.

USFWS Seeks Proposals for Conservation Funding

The U.S. Fish and Wildlife Service is seeking proposals for private lands conservation funding through its Private Stewardship Grants program. Approximately \$7.1 million is available to support on-the-ground conservation efforts on private lands

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Officer's Notebook

Decoy Works on Deer as Well as Road Hunters

On the second day of the 2003 November deer season, I worked a deer decoy operation in northwestern Saunders County with Mike Luben and Dina Barta, fellow Nebraska conservation officers. Luben was stationed down the road to the eastern side of the decoy to stop violators coming that direction while Barta took care of the western side. My job was to run the decoy's remote and keep my partners informed about what was happening. If someone shot at the decoy from the road, I was to tell my partners who fired the shot, describe their vehicle and which way it was traveling.

Early in the morning it was cold and fog hugged the ground in patches. The decoy was set up in an alfalfa field, about 160 yards from the road. I hid in a pile of hay bales about 75 yards away. When the first vehicle came down the road and crested the top of the hill, I moved the decoy's head. The driver hit the brakes and the vehicle slid to a stop. The person inside the vehicle looked at the decoy for several minutes without firing, but when I moved the decoy's tail, "BOOM!" After firing, the driver continued down the road and I radioed Luben and told him the vehicle was heading his direction. He stopped the shooter and gave him a ticket for shooting from the road.

Forty-five minutes later the fog lifted and the sun came out. It was a bright, beautiful, cold day. During the next few hours, several vehicles stopped and looked at the decoy. While some hunters stuck rifles out their window, nobody else took a shot. Some people honked at the decoy trying to get it to move, and others got out and threw rocks toward it.

At about 10:30 a.m. I moved out of the hay pile and sat with my back up against a bale. I was chilly and the warm sun felt good. Because few vehicles were now stopping, I visited on the radio with the other officers about wrapping up the operation. Then I looked down the hill at the decoy. I thought I saw a shadow moving up the valley towards the decoy, but could not make out what it was because of a small rise at the bottom of the hill. As I watched, a buck walked out of the valley and headed towards the decoy. At first I mistakenly thought it was trying to pick up the decoy's scent by sniffing the ground. Instead, he had his head down and aimed his four-point antlers directly at the decoy. When he got within five feet he suddenly charged the decoy, hitting it hard enough to pull up two of the stakes holding it upright. The buck pranced around the decoy, shaking his head as if in disbelief that the decoy hadn't moved. Then he charged it again, this time from the other side. I was amazed. Over the radio I told officers Luben and Barta what was taking place and they couldn't believe it either.

As the buck pranced around the decoy, I moved the decoy's tail. The buck stopped dead in his tracks and stared at the decoy. Then he threw up his head and took off like a flash with his tail raised. Apparently the mechanical motor noise from the tail had scared it. It was an unbelievable scene to witness and made the decoy detail well worth the time. It also just goes to say that the decoy works as well on deer as it does on hunters.

— Sean McKeehan, Conservation Officer, Ashland

through these grants.

The cost-share program provides federal grants on a competitive basis to individuals and groups engaged in voluntary conservation efforts on private lands that benefit imperiled species. Landowners and their partners may submit proposals directly to the service for funding.

To find out how and where to submit proposals or for more information, visit the Private Stewardship Grants web site at http://endangered.fws.gov/grants/private_stewardship.html, write U.S. Fish and Wildlife Service, Branch of State Grants, Endangered Species Program, 4401 N. Fairfax Drive, Room 420, Arlington, VA 22203, or call (703) 358-2061.

Hunting Accidents Increase, But No Fatalities in 2003

Mike Streeter, Nebraska Hunter Education Coordinator, said that reported Nebraska hunting accidents increased in 2003, but for the third year in a row there were no hunting fatalities.

There were 18 non-fatal hunting accidents reported in Nebraska in 2003, six more than were reported in 2002. "Every one of the accidents could have been prevented," he said. "We are very concerned about the increase, especially when we know none of the accidents would have happened if the shooter or the victim would have followed the rules of firearm safety."

Though any accident is one too many, Streeter said, the figures should be put into the proper perspective. Of the approximately 140,000 people who hunted or trapped in Nebraska in 2003, only 18, or about .0001 percent, were the victims of hunting accidents.

During the ten-year period 1994-2003, the fewest hunting accidents were recorded in 1996, when eight accidents occurred. In both 1994 and 2003 there were 18 hunting accidents reported, and none were fatal. ■

Fishing During the Walleye Spawn

Sportfish population does not decline because of catch during reproduction.

By Eric Fowler

The question is asked every spring: Why doesn't the Nebraska Game and Parks Commission close lakes, especially the areas near dam faces, during the walleye spawn to protect brood fish?

Photos of proud anglers holding up large, egg-laden female walleyes destined for the fry pan before they have spawned seem to be clear evidence that the population will suffer. The fact that the dams at two Nebraska reservoirs – Lake Minatare near Scottsbluff and Sherman Reservoir near Loup City – are closed during the spawn adds to the confusion. And doesn't Minnesota's walleye season open after the spawn?

But the reason more waters are not closed, said Daryl Bauer, a Commission fisheries manager, is simple: "We've not seen a biological reason to do so."

Bauer gathered data at Harlan County Lake in 1992 to make his point. Through the collection of walleyes in the spring to provide eggs for hatcheries and angler surveys, Bauer estimated walleyes in the reservoir produce a billion eggs a year. Most walleyes caught during the spawn are males. And even if every harvested female was full of eggs – and they are not because many are caught after the spawn – only two percent of the eggs would have been taken by anglers. Like most other fish and wildlife species, walleyes produce excess numbers of offspring because of low survival rates. Weather conditions, predatory species and existing population levels are among the factors that determine survival rates, and a two percent reduction in eggs does not translate into a two percent dip in the walleye population.

Bauer said anglers often point to



Walleye anglers troll along the face of Kingsley Dam at Lake McConaughy.

Minnesota's closure of the walleye season during the spawn as a reason that state is one of the best places in the country to fish for walleyes. He asked rhetorically, "The number of Minnesota walleyes couldn't have anything to do with the fact that they've got 10,000 lakes, could it?" Minnesota biologists agree that protecting brood fish does little to help the walleye population. What the closure does is to make the opener a can't-miss event, much like opening day of pheasant and deer seasons in Nebraska.

Despite what many anglers think, walleye fishing is not good during the spawn. Bauer said his personal experience and angler surveys back up that fact. During the spawn, biologists using electrofishing boats, which use an electric current to temporarily stun walleyes, can "turn the water white with walleyes," according to Bauer. "They're packed up there on the dam. If those fish were feeding, you'd catch a stinking walleye on every cast. They're more interested in spawning than they are in feeding."

Often walleyes caught from dam faces during the spawn are snagged or foul hooked. Bauer said Sherman and Minatare reservoirs are closed because of incessant problems with these illegal fishing techniques.

Angler surveys show that more walleyes are harvested in May and June than in March and April. Those fish include big females. Bauer said, "I always say we could protect more walleyes by closing the season during Memorial Day weekend than we could by closing the season during walleye spawn. That's sensationalism, but it gets the point across."

"If people want to fish for walleyes during the spawn and if they aren't harming the resource, why not give them the opportunity to go fish?" ■



The walleye, *Stizostedion vitreum*, is a favorite sportfish of Nebraska anglers.

Thursdays Are for Trout

Photos and text by Eric Fowler

For most of their lives, Eloise Johnson and Carmen Frickenstein have fished Verdigre Creek. Now retired, the long-time friends still slip on hip waders, wander downstream and probe their favorite holes for trout.

"Say lady, you're pretty zippy there," Eloise Johnson said to her friend, Carmen Frickenstein, as they walked down a trail toward the east branch of Verdigre Creek last June to fish for trout.

"Not really," said Frickenstein.

Zip, of course, is relative. For an 83-year-old woman, Frickenstein was indeed moving along. So was Johnson, a self-proclaimed "old and decrepit" woman of 75 years. "I hurt my knee, so I'm not moving as well as usual," Johnson said, almost apologetically.

The women – Frickenstein from Creighton and Johnson from Winnetoon – had walked this trail at Grove Lake Wildlife Management Area (WMA) near Royal hundreds of times. Lifelong residents of northeastern Nebraska, they had fished this creek as children. They have been fishing it together since 1967, and in that time have caught a few thousand trout. Though some fly rod-toting purists might disapprove of the women's techniques, they would be pleased to get around as well as this pair when

they reach their ages.

"Don't tell them all of our secrets, but we can tell where to fish by where the tracks are," Frickenstein said, pointing to the tire marks left in the tall grass by trucks that once a week bring 200 or more rainbow trout to one of four locations on the creek from the Nebraska Game and Parks Commission's Grove Trout Rearing Station. That reliable supply of trout and their enjoyment of fishing, the outdoors and each other's company have kept Frickenstein and Johnson coming back most Thursdays, and sometimes Fridays, from spring into fall.

Truck tracks aren't all they notice. On this walk, Frickenstein pointed out a fresh set of deer tracks on the trail. It was about 9 a.m. when they approached their starting point a few hundred yards from the parking lot.

"Where do we get down?" Johnson said.

"We got down here last time," Frickenstein replied, leading the way off the trail and down the steep bank to crystal-clear water.

They baited their No. 8 gold hooks with pieces of nightcrawler, and for a touch of color tipped the hooks with Berkley Power Eggs. One used a fluorescent red egg, the other chartreuse. If they find one color is working better, they both use it. "You don't need too much worm," Frickenstein said. "Two or three will get you a limit."

Wearing Red Ball hip waders patched over the years of use, they headed downstream. Most fly-anglers walk

upstream, casting their lures ahead and allowing them to drift toward them on the current. This presentation gives the bait a natural appearance, a necessity to catch wily, wild trout. And by walking upstream, any vegetation or muck an angler might kick up floats away from the fly, reducing the chance of spooking fish.

Phooey, these women say.

"We go with the flow of the water," Johnson said. "That's what the men tell us is wrong.

"We do everything wrong according to the men."

Both women carried spincasting rods and reels older than many of the people who fish the stream. Frickenstein used a vintage steel model. She and her late husband, Joe, each bought one when they were married in 1941. The price: 98 cents. "And we thought we couldn't even afford those, but we did it anyway," she said. "We bought them because we both liked to go fishing. I think that's probably one of the first things we

bought." She still has both rods. Her grandchildren use Joe's. "I wouldn't sell those for \$500 because you can't get them anymore."

Frickenstein's rod was fitted with a Johnson reel. "The one I usually use fizzled out last week," she said of her Zebco 202.

Johnson also used a Johnson reel, and her fiberglass rod was newer than Frickenstein's. She's not certain, but it was probably made in the 1950s. Considering fiberglass rods weren't

produced commercially until the late-1940s, hers would also fit in the vintage category. Johnson's husband's uncle gave it to her son, who died in 1967. She's been using it since.

The rule that says anglers should wear dark colors so they are less visible to fish doesn't concern these anglers either. Frickenstein's purple shirt might have met those standards if not for the bright pink and white screen-printing on its front. If they didn't see that, the trout certainly



Standing in Verdigre Creek, Carmen Frickenstein (right) shows off a rainbow trout while fishing with long-time friend Eloise Johnson.



Grove Lake Wildlife Management Area is located 2 miles north of Royal in Antelope County. The 2,000-acre area includes Grove Lake and 1½ miles of Verdigre Creek, a pristine trout stream.



Frickenstein removes the hook from a trout.

would see the pink jig box hanging from her belt. Johnson's bright yellow shirt with orange and red stripes was anything but dark.

"What I get a kick out of is these guys come out of the city with these fancy fish poles and these camouflage outfits that they spent lots of money on," Frickenstein said. "That's silly."

"They've got their fly rods that they try to use and get tangled up everywhere in all the trees and brush and such," Johnson said.

Frickenstein and Johnson are not much for casting. They walk

downstream, usually side-by-side.

In spots where the vegetation grows thick and the open water is narrow, they go single file. But they always fish opposite sides of the creek.

Holding the rod in one hand and the line, weighted with a single, large split shot, in the other, they jig their baits past spots likely to hold trout.

Methodically, they poke their rod tips under moss beds and cut banks, letting out line so their baits drift toward the fish. Or they drop their offerings behind fallen logs or into other tangles or holes that might hold fish.



Johnson and Frickenstein use vintage rods, reels and creels on their weekly summer trips to the creek.



Johnson tangles with her first trout of the day, pulled from behind a fallen branch.

"We know all of the hidey holes," Johnson said.

"We even made a few," Frickenstein said.

They expect results. "If we don't catch any fish, we move," Frickenstein said. That was the case this morning on the first stretch of creek they plied. Other than seeing the silver flash of a trout they spooked from cover in the first bend they walked, there was no sign of fish. So they headed up and over a hill to another favorite spot.

"The Lutherans are having an ice cream social," Frickenstein said when

they arrived at the creek again. "They used to have good homemade ice cream. Now they buy it."

Such small talk is an integral part of every fishing trip for the pair. Catching up on the latest happenings around town and elsewhere is one reason they fish together. Talking breaks another trout-fishing rule. "The guys say, 'Oh, you've got to be quiet and whisper,'" Johnson said with a chuckle.

"Hogwash. I'd say we caught as many fish as they did."

Frickenstein was already teaching at Creighton when Johnson joined the

staff in 1966. Frickenstein loved fishing the creek. Her husband loved to fish, but he preferred fishing for walleyes from his boat. Looking for a partner, she asked Johnson, who gladly accepted. “The day school was out, we started,” Frickenstein said. “We’d go every week. We’d even go in the rain.”

The two would fish once a week from the time school let out in May until it resumed in the fall. After they retired – Frickenstein in 1985 and Johnson in 1987 – and school didn’t limit their schedule, they would start fishing a few weeks earlier, whenever the weather allowed, and continued into October. More often than not, they fished on Thursdays. “And everybody knew it was our day,” Johnson said.

day. It had been a week since the last load was delivered, and it’s likely that a good percentage of those had already headed for a frying pan.

Through surveys, the Commission estimates about 60 percent of the 10,000 fish it stocked in the creek in 2000 ended up in anglers’ creels. This is a busy place. About 5,000 anglers from 26 Nebraska counties and several states fished Verdigre Creek in 2000, an average of 13 a day. On weekends when the weather is nice, it’s easy to find anglers from Norfolk, Columbus, Lincoln and Omaha. Anglers catch about a fish an hour. Frickenstein and Johnson typically do better than that. But on this day, they had no fish to show for their first half-hour on the

A few minutes later, a hoot from Frickenstein signaled a fish was hooked. “Oh no,” followed a few seconds later, telling the story: The fish got off her line.

The Commission has owned a piece of Verdigre Creek since 1928. In 1951, it acquired more land to expand its trout rearing station and to build Grove Lake. Most of the land frequented by trout anglers today was purchased by the Commission in the late-1950s and early-1960s.

Area residents had been enjoying the spring-fed creek, which originates just east of Royal, long before that. Born in Brunswick, seven miles east of Grove Lake, in 1920, Frickenstein has visited the creek as long as she can remember. “Well, heck, when I could walk we started to come over here,” Frickenstein said. “We used to have so much fun, but then we kids mostly played in the crick until Dad said we had to learn to fish.” That day came when she was six or seven years old. “My dad loved to fish.”

Johnson’s trips to the creek as a child were more frequent. She was born in 1928, a half-mile west and two miles south of where the pair had started fishing this day. If they couldn’t find a horse to ride, she and her siblings would walk to the creek to swim. “Back in those days there was no bathroom in the house, so in summertime we’d have our bath in the creek,” she recalled. Johnson and her husband, Lawrence, better known as Swede, were renting the land that is now home to the rearing station when the Commission purchased it. They lived in a house and grazed their cattle in the pasture the creek runs through. Johnson remembered catching four-pound, native brown trout from the creek. “They stretched across the bottom of an old wash tub,” she said.

Most trout don’t get the chance to grow that big these days. Most of the rainbows stocked in the creek are about 10 inches long. A few avoid the hook and spawn in the creek, as do some native brown trout, which in 2000 made up about six percent of the harvest. As one of five Class A trout streams in the state, this stretch of Verdigre Creek is well suited for fish. The riffles, runs,

most beautiful spot in the world,” Frickenstein said.

“We aren’t using many worms, are we?” Frickenstein asked her friend, rhetorically.

“We never get skunked,” she said a few minutes later.

“This may be it,” Johnson replied.

“There are no guarantees in fishing,” Frickenstein said.

A few bends later, Johnson had another bite, but didn’t hook the fish. A cool breeze coming off the creek made fishing comfortable following a week of temperatures in the upper 80s. “This is the best day all week,” Frickenstein said.

A few steps farther and Frickenstein had a bite, but again, the fish didn’t take the bait deep enough to allow for a good hook set.

“That wren is happy,” she said, as she listened to one of many chirping birds around her.

The two had fished the creek often enough to know which holes typically

produced fish. “A lot of times I lie in bed at night and I think about this creek and I can just draw where all the bends are,” Frickenstein said. “I can just see them and we can just kind of know where the fish are going to be most of the time, not all the time, but you know the best places to go.”

That didn’t mean they passed holes that seldom produced fish. Johnson let her bait drift under a bed of moss growing behind a tangle of fallen tree branches and pulled out the first fish of the day. It had been nearly two hours since they hit the water. “I can’t believe I caught one there after all these years,” she said, dropping the fish in her vintage wicker creel. “After that, I’d better have some more bait.”

With another piece of worm and an egg in place, she dropped her line back in the hole. Another fish took the bait, this time literally stripping her hook bare.

Meanwhile, Frickenstein had ducked under a fallen tree and worked her way



The day’s catch and Frickenstein’s 1940s-era rod rest on a bed of vegetation.

“In town, everybody knew when it came Thursday, don’t call me to do nothing cause I’m going fishing,” Frickenstein said.

This Thursday, the fish weren’t cooperating. Typically, the fish are stocked earlier in the week, which is one reason the women fish on Thursday. The next batch of stocked fish wouldn’t arrive until the following

creek.

“Come on, you cotton-picking fish,” Frickenstein said, hoping to coax a trout into biting.

“We haven’t got a fish here for a long time,” she said, referring to a particular bend in the creek. “I don’t know why we ever come here. I guess we think we always have gotten fish here ...”



Although they don’t move as nimbly as they once did, in-stream obstacles don’t deter these fishing partners.

pools and cut banks, sand-and-gravel bottom and abundant aquatic vegetation meet the trout’s every need.

“You’re really working there, aren’t you,” Johnson asked her partner.

“I’m trying every little hole I can find,” Frickenstein replied, still searching for the first fish of the day as they continued to work their way downstream.

“There used to be a hole by that bend there,” she pointed out. “If you were patient, you could get your limit there. I remember two guys who would always try to beat us there.”

“They’d practically run to beat us there,” Johnson recalled.

As the stream flows, Verdigre Creek covers about three miles as it winds its way through its narrow, deep valley from the rearing station to the lake – twice as far as the crow flies. About half of this reach is owned by the Commission and open to the public. Hardwoods and cedars cover the hillsides, and in spots, meadows stretch on either side of the creek. “This is the



Frickenstein and Johnson eat a sack lunch on a picnic table installed at their request at one of the Verdigre Creek trailheads.

downstream and around a bend, where she landed her first fish of the day. “It didn’t fool around at all,” she said, dropping the trout in her canvas Arctic Creel. “If they’re going to bite, they’re going to do it right away.”

Johnson continued to ply the hole that produced her first fish and was rewarded with a second. “I was surprised to have one fish,” she exclaimed, “and now two.”

Unable to catch a third, Johnson caught up with her partner and they continued downstream. “I’m surprised we’re not hearing any cardinals,” Frickenstein said.

“Nature is a wonderful thing,” said Johnson.

At 11:30 a.m., Frickenstein landed another fish. “I’ve still got my first worm,” she said after removing the hook. “I’m going to try to get one more.”

“You’re being conservative, aren’t you?” Johnson said.

“If we run out, a lot of people in town tell me they’ve got plenty and

they’ll give me some.”

Twenty minutes later, that worm produced a third fish.

“Did you get it in the moss?” Johnson asked.

“Right at the end,” Frickenstein replied, pointing to the downstream end of a long finger of moss in midstream. “You know they like it there.”

Around the next bend, she landed her fourth and biggest fish of the day – a 13½ incher that had been in the creek for a while. “Well, I’ve got to start a second worm,” she said.

That fish would be the last of the day, and put Frickenstein up four to two on her friend. Not that they keep score. “We don’t care,” Frickenstein said. “I think it’s even.”

“One time she’ll catch more, and the next time I’ll catch more,” Johnson said.

“Remember the north side over there where the grass grew over the bank?” Johnson asked, pointing across the stream.

“That was always so good,”

Frickenstein said.

They continued their small talk, about what they’d planted in their gardens and other things that kept them busy.

“I’m not making jelly, pickles or anything this year, are you?” Frickenstein said.

“No,” Johnson replied.

“It doesn’t pay,” Frickenstein said.

When prompted, they told stories. Like the time they were chased by a rabid raccoon Johnson had awakened when she poked her rod under a cut bank. Or the time she confronted a man fishing directly below the rearing station, an area that is off limits to anglers.

“Eloise is braver than I am, and when we got over there she said, ‘Say sir, I think you’re fishing where you aren’t supposed to,’ ” Frickenstein said. “Boy he got mad ... I thought he was going to push us both in and hold us under the water.”

“Well, where he was fishing was right where it was posted that you

weren’t supposed to fish,” Johnson said.

“He was having good luck, too,” Frickenstein said.

Their stories stretch to Minnesota, where the pair traveled each summer for nearly 20 years with their husbands to fish for walleyes. Johnson recalled a big walleye she caught and how the men in nearby cabins were impressed that a schoolteacher could catch such a fish. And they told about their days teaching in rural schools, where Frickenstein made \$35 her first month on the job and Johnson \$100. And how Johnson kept Frickenstein coming back after a battle with cancer in 1983.

“I just about died in November,” she said. “Man, I was sick. And Eloise, in the spring, kept saying, let’s go fishing, let’s go fishing. I never said anything, but boy, that summer, I could hardly hang in there. But I did. If it wouldn’t have been for her, I never would have stuck with it.”

“It’s sure duddy up here. We didn’t even get a nibble,” Frickenstein said as they reached the end of the stream’s public stretch. They called it a day and headed back to the parking lot. They had fished for a little more than three hours. With six fish, they were under their average catch – a limit of seven fish each – but about even with the average for the stream.

“How far is it?” Johnson asked.

“I don’t have any idea but I know it gets longer every time we have to walk back,” Frickenstein said.

At the end of the trail was a picnic table where they sat, ate lunch and continued their talk. The table was added at their request, as was the modern pit toilet near the parking lot. Several years ago, Johnson wrote the Commission and voiced her displeasure about the lack of restroom facilities for women who came to the creek to fish. She had seen the facilities developed on the Missouri River and thought anglers on Verdigre Creek deserved better than the run-down, one-seater at this site. “She signed my name to it,” Frickenstein said.

Not long after their letter, they arrived one day to fish and found the area manager clearing brush to install a

new pit toilet. Jokingly, he asked if there was anything else they wanted. They said a picnic table would be nice.

They don’t fish as early or as often as they once did. They used to arrive at 7 a.m.. Last summer, they only fished about once every three weeks. Too hot, they said. Maybe they will get out more this year.

Frickenstein said, “A couple of weeks ago, there was a guy here who said, ‘You still fishing?’ ‘Yes,’ I said, and he said, ‘How long are you going to do that?’ and I said ‘Till the good

Lord poofs out my light.’ ”

“I’ll bet as long as we can manage to hobble along, we’re going to do it,” Johnson said.

It was a half-mile back to the parking lot. In the past three hours, they had easily walked twice that distance, following the twisting, turning stream. But they weren’t fazed.

“You’re stepping along pretty good today. You’re knee must be better,” Johnson said.

“It’s good today,” Frickenstein replied. ■



Side-by-side, Frickenstein and Johnson work their way downstream.

Touring Lewis & Clark

By Ken Bouc

On Nebraska's stretch of the Lewis and Clark Trail, this summer's highlight will be the national signature event July 31 through August 3 at Fort Atkinson State Historical Park and in Omaha commemorating the first council with Native Americans.



At Lake Yankton below Gavins Point Dam, living historians portraying Corps of Discovery soldiers fire a salute at a 2001 reenactment of the council with the Yankton Sioux.

The Missouri River Valley, from its mouth at St. Louis to its Montana headwaters, will fill with travelers in 2004 as tourists and history buffs retrace the steps of U.S. Army captains Meriwether Lewis and William Clark and their Corps of Discovery on the 200th anniversary of the epic journey.

Events, ranging from grandiose and officially sanctioned national signature events to small, community-based productions, will entertain and inform visitors. Although signature events will be the focal points, locally sponsored affairs should not be overlooked. The upstream progression of events mirrors

the Lewis and Clark Expedition's advance up the Missouri 200 years ago, and makes it easy to attend several observances in one short trip. Nebraskans who live near the activities in 2004 can easily attend many events in a few outings this summer.

The highlight on Nebraska's stretch of the Lewis and Clark Trail will occur July 31 through August 3, when the eyes of the nation will focus on festivities at Fort Atkinson State Historical Park near the town of Fort Calhoun and in Omaha. These events will commemorate the Expedition's first council with the many tribes they encountered on their journey. Nebraska's Lewis and Clark bicentennial commemoration will be

one of just seven signature events in 2004, and one of 15 through the 45 months of the national Lewis and Clark bicentennial observance.

These national signature events, which are sanctioned by the National Council of the Lewis and Clark Bicentennial, are special in scale and historical significance. Each signature event is intended to focus attention on a location where a facet of the Lewis and Clark story of national significance occurred, and to educate as many people as possible about that aspect of the Expedition.

The historical significance of events in the Fort Atkinson area 200 years ago is self-evident. "That first council with

the native peoples of the newly purchased Louisiana territory, which took place at or very near the site of this signature event, was the fulfillment of one of President Thomas Jefferson's mandates to Lewis, Clark and their Corps of Discovery," said Jim Swenson, manager of the Nebraska Game and Parks Commission's eastern parks and executive director of the Nebraska Lewis and Clark Bicentennial Commission.

Achieving the appropriate scale of the signature event was the responsibility of Nebraska's bicentennial commission. The signature event's daytime activities take place at the "Corps of Discovery Festival," which will occupy 25 acres

Signature Events

Expedition's Departure: Camp River DuBois, May 13-16, Lewis and Clark Historic Site, Hartford, Illinois. Opening Ceremonies at the Gateway International Raceway in Madison. Expedition Departure Day activities, May 14, at the Lewis and Clark State Historic Site include heritage crafts demonstrations, scientific presentations on flora and fauna found by the Expedition, and a performance by the U.S. Army Old Guard. May 15-16 events include powwows, reenactments, scholarly presentations, exhibits, foot and bicycle races, canoeing and Chautauqua events. www.lewisand-clarkillinois.org; (618) 468-2288

St Charles: Preparations Complete, The Expedition Faces West, May 14-23, a nine-day national commemoration in St. Charles, Missouri. Replica Lewis and Clark keelboat and pirogues, manned by the Discovery Expeditions of St. Charles reenactors, arrive on May 15 from Camp River DuBois. Boats and crew will be accessible to visitors. Weekends include reveille and retreat ceremonies with more than 25 fife and drum corps and military units. Highlights include reenactment of Lewis and Clark's encampment, interpreters in authentic 1804 dress, more than 60 booths offering crafts and foods, an American Indian encampment, and horse and carriage parades. Lewisandclarkstcharles.com; (800) 366-2427

Heart of America: A Journey Fourth, July 3-4, Kansas City, Missouri, and Atchison and Leavenworth, Kansas, commemorates the first Independence Day observance west of the Mississippi. Two blasts from the keelboat's cannon near present-day Atchison, Kansas, will represent the Expedition's festivities in 1804. The celebration features an air show, reading of the Declaration of Independence and fireworks displays over the Missouri River. The Kansas City area offers an extensive list of historical attractions, with commemorative activities lasting nearly three weeks, June 19-July 11. www.journey4th.org; (800) 858-1749

First Tribal Council: July 31-August 3, Fort Calhoun and Omaha, Nebraska. Fort Atkinson State Historical Park near Fort Calhoun is the site of Lewis and Clark's first council with native peoples, which will be dramatically re-created in evening performances in Omaha. A Lewis and Clark piano concerto by composer Philip Glass will be an integral part of evening performances. Daytime activities at Fort Atkinson SHP include living history demonstrations, American Indian cultural presentations, and interactive educational workshops. lewisandclarkne.org; (800) 228-4307

Oceti Sakowin Experience: August 27-September 26, Chamberlain and Oacoma, South Dakota. Commemorate the bicentennial of the Lewis and Clark Expedition with the Lakota, Nakota and Dakota peoples. Travel the tribal lands and reservations of South Dakota and learn about American Indian experiences before, during and after the Lewis and Clark Expedition. The event kicks off August 27 in Chamberlain and Oacoma with the Native American Art Show and Auction. For event information, contact the Alliance of Tribal Tourism Advocates. www.attatribal.com or (605) 773-3301

Circle of Cultures: Time of Renewal and Exchange, October 22-31, Bismarck, North Dakota. This event celebrates the cordial welcome given the Lewis and Clark Expedition by the earthlodge peoples of the upper Missouri River and renews the bonds forged during the winter of 1804-05. Visitors will taste what the explorers tasted, see what they saw and hear what they heard. Circle of Cultures will showcase the thriving centuries-old trading "Mecca" of the northern Plains. Experience the high-tech Virtual Village of the Mandans at its unveiling. Enter replica earthlodges with Native American interpretation and demonstrations. Enjoy reenactors and scholars, including James P. Ronda, Clay Jenkinson, Tom Theissen, Dayton Duncan, Ray Wood, Amy Mossett and others. www.circleofcultures.com; (800) 767-3555

at the foot of the bluff where Fort Atkinson SHP is located. A natural setting of meadow and trees, the site is very near the probable channel of the Missouri River in 1804 and a campsite of Lewis and Clark. Across the road from the festival will be 50 acres of free parking.

The festival will include a large area devoted to Native American topics, and another with living historians interpreting a Lewis and Clark campsite and a fur trade rendezvous, plus a replica of the Lewis and Clark keelboat. Other areas will be devoted to demonstrations, storytelling, reenactments and hands-on activities. A large educational tent will feature historians, authors and lecturers of national repute as experts on Lewis and Clark and western history. They include Gary E. Moulton of the University of Nebraska-Lincoln, editor of the 13-volume *The Journals of the Lewis and Clark Expedition*, authors James Ronda and Dayton Duncan, and lecturer Hal Stearns. "There's all kinds of activities for families at the festival, and admission is free," Swenson said.

More will be happening at Fort Atkinson SHP atop the bluff overlooking the festival, according to Swenson. The bluff's top, of course, was vacant when Lewis and Clark were there, but they recommended in their journals that a fort be built there someday. Sixteen years later, the U.S. Army built Fort Atkinson on the site, the nation's westernmost outpost for most of a decade. Living historians will re-create life as it was the 1820s at the fort, which has been reconstructed, ranging from military drill and cannon firing to the daily chores of blacksmiths, carpenters, gunsmiths and sutlers.

Other attractions include displays at the Harold Andersen Visitor Center, and a new sculpture garden of life-sized bronzes depicting that first tribal council. A state park entry permit is required at Fort Atkinson SHP.

The signature event's evening activities in Omaha will take place in Elmwood Park south of the University of Nebraska-Omaha's Weber Fine Arts Building. There, "First Tribal Council," a professionally written dramatization of the Expedition's first meeting with

tribes of the Louisiana territory will be performed by the Nebraska Repertory Theater each night, along with a piano concerto created for the occasion by award-winning composer Philip Glass.

The First Annual All Nations Pow Wow, sponsored by the Nebraska Commission on Indian Affairs, will take place across Dodge Street in Memorial Park during the signature event. The five days will include a traditional Indian market, reenactments, concerts, hands-on activities, native dance and drum exhibitions and photography and other exhibits.

A grand-opening dedication of the Missouri River Basin Lewis and Clark Center in Nebraska City will be held July 30. The new 12,000-square-foot facility on the west rim of the Missouri River Valley focuses on the more than 300 zoological and botanical discoveries of the Expedition. Its exhibits will include a life-sized replica of the keelboat used by Lewis and Clark, the same craft that appeared in the large-format film, *Lewis and Clark: Great Journey West*.

The festivities at Fort Atkinson SHP and in Omaha, as well as the other

national signature events of 2004, are the focal points of Lewis and Clark bicentennial activities for the year.

For each of these national signature events, dozens of smaller, locally significant observances will take place along the Lewis and Clark Trail. Two observances will take visitors to a series of destinations and events. The Shannon Trail involves a scavenger hunt of sorts and a search for local history in a dozen or more small northeastern Nebraska communities, and the Lewis and Clark Passport Education Program involves visits and educational opportunities at nine points of interest, including parks and interpretive centers, on both sides of the river.

The Shannon Trail is not so much about Lewis and Clark as it is about their youngest and least-experienced soldier, Private George Shannon. Eighteen years old at the time, Shannon became separated from a party looking for the Expedition's strayed horses near Wynot, Nebraska, on August 26, 1804. Shannon, thinking the boats had left without him, hurried upriver when, in fact, the main party had paused to arrange for a council with the Yankton

KEN BOUC



Reenactors portray 1820s Army life at Fort Atkinson, which was built on a site Lewis and Clark recommended in 1804.



ERIC FOWLER

Visitors at Lewis and Clark State Park near Onawa, Iowa, inspect a replica of a keelboat like the one the explorers used to travel the Missouri River 200 years ago.



This image of Howard Wolf of Omaha is part of "Pow Wow Plains," a photographic exhibit by Tom Tidball to be shown at the All Nations Pow Wow.

Sioux. Sixteen days later and 145 miles upriver, the Expedition caught up with the nearly starved private.

Twelve chainsaw sculptures depict Shannon in the 16 communities on the Shannon Trail. Travelers who locate all 12 and obtain a "passport" stamp at each site earn a limited-edition print of Private Shannon. "A Tale of the Trail," a dramatization about Shannon's adventure, will be presented by the Shannon Trail organization at weekend celebrations in Verdigre, Crofton and Hartington. For information on the Shannon Trail and the performances, call (402) 667-6557.

Farther down the Missouri, in Nebraska and Iowa, the Lewis and

Clark Passport Education Program features various demonstrations and activities each weekday morning and afternoon from June 14 through August 13. Activities on Mondays, for example, will begin at Brownville, Nebraska, where visitors will help set up an 1804 U.S. Army camp, then move on to Waubonsie State Park across the river in Iowa for afternoon programs on the fish of Lewis and Clark and cooking of the period. And so it goes, upriver through the week to South Sioux City for the Friday afternoon sessions. Call (712) 482-3029 for details.

There will be many single-destination events, among them living history

activities and reenactments. Look for them at Lewis and Clark State Park near Onawa, Iowa, June 10-13 and again August 7-9, with the added attraction of replicas of Lewis and Clark's keelboat and two pirogues. Other events include the White Catfish Living History Weekend July 23-25 at the Western Historic Trails Center in Council Bluffs, a living history encampment August 21-22 at the Sergeant Floyd Museum and Welcome Center in Sioux City, and a large gathering of living historians, Native American dancers and traders at Lake Yankton below Gavins Point Dam August 27-29.

These events are within easy reach of many Nebraskans, and those with an intense interest in Lewis and Clark should plan a visit to St. Louis. The Jefferson National Expansion Memorial, with the Gateway Arch and its excellent permanent and special exhibits, is a premiere attraction. The same is true of an exhibit of Lewis and Clark artifacts gathered from 40 collections across the country and on display at the Missouri Historical Society's museum until September 6. Following its debut in St. Louis, "Lewis and Clark: The National Bicentennial Exhibition" will then go on a national tour through September, 2006. Two signature events in the St. Louis area in mid-May make that an attractive time for a visit.

Or, as an alternative to the crowds, traffic and fast pace of the city, consider Swenson's suggestion. "If you want to experience something that Lewis and Clark experienced, check out the Missouri National Recreational River the runs from Gavins Point Dam to Ponca. For westbound travelers, it's the first glimpse of the natural Missouri River that challenged Lewis and Clark for the first year-and-a-half of their westward adventure," he said. Swenson noted that Ponca State Park lies at the eastern edge of that piece of river and is the site of the new Missouri National Recreational River Resource and Educational Center, with a gallery of exhibits explaining both the natural and cultural history of that river. Including, of course, the Lewis and Clark Expedition. ■

2004 Lewis and Clark Bicentennial Events

- Through April 18, "Adventures With Lewis and Clark," Omaha Children's Museum. (402) 342-6164
- Through May 25, Lewis and Clark Study Group, each Tuesday, 9 to 11:30 a.m., free, Western Historic Trails Center, Council Bluffs, IA.
- Through July 31, Lewis and Clark tours, puppet shows, gallery walks, special programs, children's programs, lectures; weekends; some advance reservations and fees required; National Frontier Trails Museum, Independence, MO. (816) 325-7575
- Through September 6, "Lewis & Clark: The National Bicentennial Exhibition," traveling exhibit of historic and ethnographic treasures, organized by Missouri Historical Society, debuts at the society's museum in St. Louis. (314) 454-3150
- April 1-June 9, "Lewis and Clark: Great Journey West," large-format film, Lied Super Screen Theater at Hastings Museum. (800) 508-4629
- April 1-August 29, "Plants of the Lewis and Clark Expedition" exhibit at Cass County Historical Museum. (402) 296-4770
- April 21, Seminar, "I Wished for the Pencil of Salvator Rosa: The Artistic Legacy of Lewis and Clark." Speaker: Joni Kinsey, Associate Professor of American Art History, University of Iowa; University of Nebraska-Lincoln Center for Great Plains Studies, 1155 Q St., Lincoln. (402) 472-3082
- May 1-Oct 10, Fossils of the Lewis and Clark Expedition, Ashfall Fossil Beds State Historical Park, Royal, NE. (402) 893-2000
- May 6, Heartland Storytelling Festival, Homestead National Monument, Beatrice, NE. (402) 223-3514
- May 7-August 29, "Lewis and Clark on the Great Plains: The Natural History," exhibit at Great Plains Art Collection, 1155 Q St., Lincoln, NE. (402) 472-6220
- May 8-August 29, "Lewis and Clark Celestial Navigation," Omaha Children's Museum, STARlab. (402) 342-6164.
- May 13-16, "Expedition's Departure: Camp River DuBois," National Signature Event, Lewis and Clark Historic Site, Hartford, IL. (618) 468-2288
- May 14-23, "St Charles: Preparations Complete, The Expedition Faces West," National Signature Event, St. Charles, MO. (800) 366-2427
- May 26, "Lewis and Clark ... Through the Eyes of a Crew Member," reenactment by Dale Clark, free, 7 p.m., Wayne State College, Wayne, NE. (402) 375-3135
- June 1, 2004-June 1, 2006, "The Voyage of Discovery's Dispatches: From the New America, 1803-1806," exhibit at Boys Town Visitor Center, Omaha, NE. (402) 498-1140
- June 3-5, "The Nature of Lewis and Clark on the Great Plains," Center for Great Plains Studies annual symposium, fee and pre-registration required, Lied Conference Center at Arbor Day Farm, Nebraska City, NE. (402) 472-3082
- June 10-13, "Lewis and Clark Festival,"

- reenactments, films, lectures, demonstrations, black powder shoot, Native American archery demonstration, replica keelboat and pirogues for viewing and rides, Lewis and Clark State Park, Onawa, IA. (712) 423-2829
- June 26-27, "Lewis and Clark Trad'n Days," Weston, MO. (888) 635-7457
- June 30, "George Drouillard: Hunter, Interpreter ... for Lewis and Clark," reenactment by Darrel Draper, free, 7 p.m., Wayne State College, Wayne, NE. (402) 375-3135
- July 3-4, "Heart of America: A Journey Fourth," National Signature Event, Atchison and Fort Leavenworth, KS, and Kansas City, MO. (800) 858-1749
- July 10-October 3.: "Rivers, Eden's Empires: Lewis and Clark and the Revealing of America," Library of Congress traveling exhibit at Joslyn Art Museum, 24th and Dodge, Omaha, NE. (402) 342-3300
- July 9-13, "Great Plains Chautauqua," historical figures of the Lewis and Clark-era re-created, music, lectures, workshops; Homestead National Monument and Beatrice, NE. (402) 223-3514
- July 16-18, "A Tale of the Trail," dramatization, ZCJB Hall, Verdigre, NE. Contact (402) 667-6557
- July 16-18, Shallow River Festival, Plattsmouth, NE (402) 296-6021
- www.plattsmouthchamber.com
- July 22-25, "A Tale of the Trail," dramatization, Crofton Auditorium, Crofton NE. Contact (402) 667-6557
- July 23-25, "Lewis and Clark White Catfish Living History Weekend," living history encampment, American Indian dancers, storytellers, children's activities; Western Historic Trails Center, Council Bluffs, IA. (712) 366-4900
- July 25-August 31, Lewis and Clark Art Exhibit, Washington County Museum, Fort Calhoun, NE. (402) 468-5740
- July 27, "In the Footsteps of William Clark," Missouri River cruise, River City Star, Omaha, NE. (402) 455-9990
- July 30, Grand opening of Lewis and Clark Interpretive Trails & Visitors Center, Nebraska City, NE. (402) 873-4293
- July 30-August 1, "A Tale of the Trail" dramatization, Skylon Ballroom, Hartington, NE. (402) 667-6557
- July 30-August 1, "First Annual All Nations Veterans Commemoration and Pow Wow," Memorial Veterans Park, 57th and Dodge, Omaha. (402) 471-3475
- July 31-August 3, "First Tribal Council," National Signature Event, Fort Atkinson State Historical Park near Fort Calhoun and Elmwood Park, Omaha, NE. (800) 228-4307)
- July 31-August 3, Corps of Discovery II Keelboat Exhibit, Boyer Chute National Wildlife Refuge, Fort Calhoun NE. (402) 468-4313
- August 1, "William Clark Birthday Party," Washington County Museum, Fort Calhoun, NE. (402) 468-5740
- August 5-8, "Pathways to the Past," Burt County Museum Lewis and Clark Celebration

- and Tekamah's 150th birthday; outdoor concert, street dance, speakers, car and truck show; Tekamah, NE. (402) 374-1749
- August 7-9, "200th Anniversary of Lewis and Clark Encampment," lecturers, reenactors, replica keelboat and pirogues for viewing and rides, Lewis and Clark State Park, Onawa, IA. (712) 423-2829
- August 14, "Lewis and Clark Fish Camp II," reenactment, speakers, fishing tournament; Crystal Cove Park, South Sioux City, NE. (800) 793-6327
- August 21-22, Sgt. Floyd 1804, Living History Encampment, Sgt. Floyd Museum & Welcome Center, Sioux City, IA. (712) 279-0198
- August 21-22, "Elk Point Heritage Days," rendezvous, traders, crafts, reenactment of election of Sgt. Gass, demonstrations, military encampment, buffalo stew dinner Saturday; Elk Point, SD. (605) 356-2164 or 356-3336
- August 21-22, Lewis and Clark Festival and tours of Spirit Mound, W.H. Over Museum, Vermillion, SD. (800) 809-2071
- August 23, "Sergeant Patrick Gass, Chief Carpenter: On the trail with Lewis and Clark," readings by the author, Bill Kloefkorn, free, 7 p.m., Wayne State College, Wayne, NE. (402) 375-3135
- August 23-29, 200th Annual Harvest Dance, Omaha Tribal Reservation Sacred Grounds, Macy, NE. (402) 837-5391
- August 27-September 6, "Oceti Sakowin Experience," National Signature Event, South Dakota Tribal Lands and Reservations, Chamberlain/Oacoma, SD. (605) 773-3301
- August 27 - 29, "Lewis and Clark Festival," reenactments, Native American dancing, traders; Gavins Point Dam/Lake Yankton, Yankton, SD and Crofton, NE. (402) 667-2546
- September 3, "Dream of the Pacific," Arts on the Green Performances, 7:30 p.m., The Rose Theater, Omaha. (402) 346-7372
- September 5, "Dream of the Pacific," Arts on the Green Performances, 2 p.m., The Rose Theater, Omaha. (402) 346-7372
- September 20, "Medical Care on the Lewis and Clark Trail," Bev Hinds, speaker; free, 7 p.m., Wayne State College, Wayne, NE. (402) 375-3135
- September 24-26, Lewis and Clark Goosefest, Pierre, SD. (800) 962-2034
- September 24-26, "Bad River Gathering," reenactment of Lewis and Clark's confrontation with Sioux, Fort Pierre, SD. (605) 223-7761
- October 11, "Foods and Cooking from the Lewis and Clark Expedition," Brad Tennant, speaker; free, 7 p.m., Wayne State College, Wayne, NE. (402) 375-3135
- October 22-31, "Circle of Cultures: Time of Renewal and Exchange," National Signature Event, Bismarck, ND. (800) 767-3555
- November 8, "Technology, the Corp ... and the Indians," Hal Stearns, speaker, free, 7 p.m., Wayne State College, Wayne, NE. (402) 375-3135

BELOW: A COTTONTAILED RABBIT SITS AMONG THE ROCKS. OPPOSITE: ROCK AND YUCCA COVER A RIDGE IN THE PATRICK BUTTES.



North of Henry

Photos and text by Bob Grier

Even from a distance, the dark ridges, buttes and twisting rock outcroppings rising from a nearly level sweep of shortgrass prairie along the Nebraska-Wyoming border in southern Sioux County form a landscape unlike any other in the state.

In late summer, or even earlier in years when the normal spotty, spring rains and winter snowfalls fail to appear, the sinuous, knife-edged ridge along the horizon is dark against the parched, dusty-buff prairie. Like a modern stealth airplane, the ridge seems to absorb sunlight, as if a permanent shadow hangs close over the rocks.

To the southwest, Laramie Peak in southeastern Wyoming stands boldly on the horizon; to the south the prairies become pasture and fertile farmland reaching the North Platte River; to the east a small, seemingly out-of-place chunk of Sandhills undulates; and to the north, Sioux County's rich shortgrass continues nearly to the Black Hills, interrupted only by white rock formations along the Niobrara and White rivers and the forested Pine Ridge.

Move close enough to touch the rocks, and their dark, roughly textured surfaces contrast with the wind-polished, wedding cake formations gleaming brightly in shafts of sunlight only a few dozen miles north.

The Patrick Buttes span about 14 miles, east to west, and nine miles, north to south, and include 20 sandstone-capped buttes, which extend





GOLDEN EAGLE NEST AND WHITEWASH MARK A ROCK WALL.

along both sides of the Nebraska-Wyoming border about 16 miles north of the small town of Henry on the North Platte River. Four buttes are entirely within Nebraska, and two others touch or extend across the state line. The remaining buttes are residents of Wyoming, but seem close enough to touch on a dry, summer day. The Patrick Buttes were so named for their location within the boundaries of the U.S. Geological Survey 30-minute Patrick Quadrangle formed by a team of University of Nebraska-Lincoln students and their geology professor, Robert M. Hunt.

Hunt's team has studied both the buttes' geology and paleontology during extended field trips since 1979 and will return later this year to begin the final phase of its fieldwork before compiling and publishing its findings.

In an early report to the National Geographic Society, which provided funding for the research, Hunt dated the sandstone caps on the Patrick Buttes to the early-to-middle Miocene, a period from 16 to 24 million years ago. The early report stated, "Fine to coarse but chiefly medium-grained, silica-cemented sandstone and pebble gravel are the most common lithologies, the gravel scattered throughout the section in lenses and stringers."

The report also noted that the Patrick Buttes rest on exposed

layers of siltstone and claystone of the Brule Formation (White River Group) and some Arikaree sediments. These earlier formations are better seen on the exposed flanks of the Pine Ridge and along the southern rim of the North Platte River, at Scotts Bluff National Monument and similar outliers to the east.

The work of Hunt and his students has revealed the rocks are relatively young in geologic time, formed during alternating periods of deposition and erosion following the rise of mountain uplifts to the west.

The buttes' cobble, marl, sand and siltstone support a unexpected variety of life. Pronghorns spring over the open grasslands between the buttes and mule deer

move easily among the roughest rocks. These rocky outcroppings offer fewer clues to life than do nearby prairies, but look closely and they are there. Fine-grained silt at the base of one of the rocks reveals the miniature prints of a kangaroo rat and the smooth rubbing made by a prairie rattlesnake returning from a hunting foray to the protection of shade. High on a vertical wall, whitewash droppings of golden eagles are on the rocks below their difficult-to-see platform nest. A discarded jackrabbit's leg, fur covered to the joint and bare bone to the hip, hangs in the sagebrush at the base of the cliff.

The nearby rim holds hundreds of cliff swallow nests, built from mud gathered by the birds from Sheep

PRONGHORN BUCK GAZES ACROSS GRASSLAND BETWEEN BUTTES.



A SAY'S PHOEBE STANDS ON A ROCKY OUTCROP.



MYSTERIOUS HOLES IN A ROCK WILL CATCH THE STORM'S RAINWATER.



Creek. Only one area of the narrow stream's shoreline seems to provide the requisite quality of building materials preferred by the birds. The swallows gather in festive bunches, vying for the opportunity to collect mud to build and repair their small, round structures.

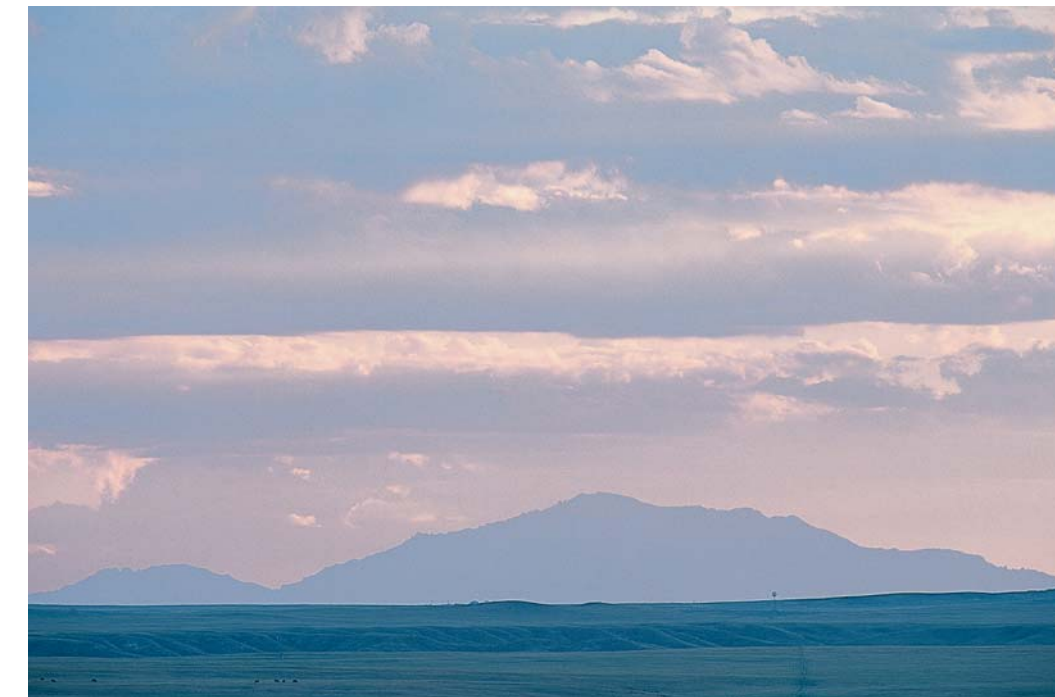
The walls of the rocky outcroppings form a labyrinth of culs-de-sac and secretive pockets. One holds a small group of currant bushes, the color and scent of their flowers providing an inviting oasis in the rocks. The scented breeze ruffles the fur of a cottontail rabbit sitting tightly against a small rock only a few feet away. His security openly in question, the rabbit bounds a few yards along a rocky trail before stopping to feed again.

The rocks also hold clues to the region's early human inhabitants. Several mysterious holes, including one with a fitted rock lid, have raised more questions than geologists, paleontologists and archaeologists have so far answered. The steep ridges also offer a few narrow passageways between open prairies – possibly ambush points for ancient hunters. Tipi rings, nearly completely buried in fine, wind-blown sediments, are along the base of one of the ridges. Like the holes in the rocks, their age and their builders remain as cryptic as the rocks.

The Patrick Buttes are, indeed, unique. Their beauty is subtle, requiring patience and perhaps compassion from the viewer. The rocks might appear hostile at first glance, especially in simmering, summer heat. But look closer and there is beauty, life and mystery where the rocks divide the prairie and sky of western Nebraska. ■

The Patrick Buttes are located entirely on private property, and landowner permission is required to enter private land for any purpose. The county road from Henry north into Sioux County is passable in most weather conditions, but less-traveled stretches sometimes become impassable in rain or snow.

LARAMIE PEAK RISES IN THE DISTANCE TO THE SOUTHWEST.



Getting the Mud Out

By Randy Stutheit, Wetland Biologist,
Nebraska Game and Parks Commission
Photos by Eric Fowler

Taking a direct approach to wetland improvement in the Rainwater Basin, land managers are now using earthmovers to scrape away sediment and unwanted vegetation.

The morning dawned bright and sunny as the duck hunter crouched in cattails surrounding an open pool of water in a Rainwater Basin marsh. As the sun rose, the hunter's attention drifted to a flock of red-winged blackbirds rising from their wetland roost, then to a pheasant crowing nearby. Without warning, a flock of blue-winged teal swept toward his decoy spread. The hunter stood and snapped a hurried shot at the retreating flock. A trailing bird tumbled to the water, but quickly righted itself and began to swim away. The hunter rushed into the open pool, hoping to retrieve the duck before it reached the cattails on the other side. But the going was difficult. With each step, he sank to his calves in mud. Before he had moved 20 feet, he was exhausted. He watched in dismay as the teal escaped into cover.

Anyone who has hunted ducks in Nebraska's Rainwater Basin might relate to his situation. Some waterfowlers have stopped hunting these wetlands because they became tired of "fighting the mud." The truth is, wetlands and muck certainly go hand-in-hand. But historically, these wetlands had a solid bottom with only a thin layer of muck. The deep, boot-sucking mud found in many of the marshes today is not a natural condition. It is caused by an accelerated deposit of sediment. Excessive sediment not only makes



Greater white-fronted geese fly over open water at Sandpiper Wildlife Management Area in the spring of 2003. Two years earlier, a sediment removal project eliminated a choked stand of cattails and river bulrushes that concealed the water.

life difficult for hunters, it also reduces the value of a wetland to wildlife. For that reason, the Nebraska Game and Parks Commission is working to remove sediment from its wildlife management areas (WMAs) in the Rainwater Basin, while other organizations are working on similar projects on federally owned waterfowl production areas (WPAs) and privately owned wetlands.

The collection and accumulation of sediment and associated nutrients and chemicals from farmland runoff is an important function of wetlands and helps maintain water quality. But

wetlands in agricultural areas, especially in the Rainwater Basin, suffer from accelerated deposition of sediment. This buildup can overload a wetland, reducing its effectiveness as both a water filter and a habitat for waterfowl.

Rainwater basins are isolated wetlands with closed watersheds, meaning they have no outlet, such as a stream. They are shallow – most are less than two feet deep – and frequently dry out. Historically, their watersheds were covered with prairie grasses and forbs. Trampling and grazing by herds of large mammals, such as bison and elk seeking water and lush vegetation, kept wetlands from becoming overgrown. Storms would flood vegetation, and occasional prairie fires swept through the basins and removed plant biomass. Bare soil exposed to strong winds was blown out of the wetlands and carried to the uplands, a process known as wind deflation.

Today, the landscape has been reversed. Most of the watersheds surrounding these wetlands have been converted to row crop agriculture, which contributes to a higher rate of soil erosion. Wetlands have dense vegetation that traps soil washed from the watershed, and more soil is blown in between harvest and planting time. In this changed landscape, without the historical processes, sediment accumulates faster and is not as easily removed by the wind.

Contractors use earthmoving equipment to clear sediment and reed canarygrass from a wetland on Deep Well WMA in Hamilton County last November.





Randy Stutheit (left), a Nebraska Game and Parks Commission wetland biologist, and Mark Hoferer, a USDA Natural Resources Conservation Service engineer, place stakes around an area where sediment and reed canarygrass were to be removed from Straight Water WMA in Seward County last winter.

Sediment depths of up to 24 inches in some Rainwater Basin wetlands have caused increasing concern among wetland biologists. This sediment accumulation affects the wetland in several ways:

- It reduces the water storage capacity of the wetland, causing water to “overflow” the edge of the hydric soils and seep away.

- It acts like a sponge to absorb and hold water, making less available to wildlife and thus reducing the value of small precipitation events, and it eliminates wetland microtopography, altering historical flow paths of water within the wetland.

- Excessive sediment also has a negative effect on plant communities within wetlands. Uncompacted sediment, which

frequently remains saturated throughout the growing season, favors aggressive perennial vegetation such as river bulrush (*Scirpus fluviatilis*) and hybrid cattail (*Typha glauca*). These species spread by rhizomes – underground stems from which both roots and shoots grow – and can quickly overwhelm and dominate more wildlife friendly plant communities. Another aggressive nonnative species, reed canarygrass (*Phalaris arundinacea*), favors sediment as a growth medium. Reed canarygrass is a prolific seed producer, and once established, can spread rapidly in a sediment-laden basin both by rhizomes and seed. Thick stands of reed canarygrass, cattails or bulrushes provide little habitat for wildlife and displace the diverse plant communities

historically found in wetlands.

Traditional management techniques have had limited success when applied to Rainwater Basin wetlands containing excessive sediment and problematic plant communities.

Inexpensive practices, such as grazing, mowing or prescribed burning, usually provide only temporary benefits. More aggressive approaches, such as disking, rototilling or using herbicides, provide longer-lasting benefits, but do not address the hydrologic problems caused by sediment.

Recently, the Commission, the U.S. Fish and Wildlife Service, and other resource agencies and organizations have taken a more direct approach to restoration and are now scraping sediment from the basins with earthmoving equipment.

Before sediment is removed, USDA Natural Resources Conservation Service soil scientists survey the wetland to identify and measure the depth of underlying hydric soils. The three primary hydric soils found in Rainwater Basin wetlands are Fillmore (associated with a temporary water regime), Scott (seasonal water regime), and Massie (semipermanent water regime). Each of these soil types includes a layer of silt or clay loam, varying from 6 to 12 inches in depth, which develops naturally. These soils overlay a heavy, clay layer that allows a wetland to hold water.

The survey shows biologists and engineers the depth of sediment and the depth of the clay layer below, helping them determine how much sediment should be removed while ensuring the clay layer, which can range from a few inches to several feet in thickness is not broken. Breaking the clay pan could cause a wetland to leak, reducing or eliminating its ability to hold water.

Reed canarygrass, river bulrush, cattail and other vegetation are removed along with the sediment, solving two problems at once. The historical wetland seed bank lying dormant under the sediment is frequently uncovered and revegetation in the scraped areas begins almost immediately. The removed sediment is often used to further restore wetland hydrology by filling water

reuse pits and road or drainage ditches, or to build control structures to improve water management.

On average, removing sediment costs about \$1 per cubic yard, making even small projects expensive. However, the benefits of the work will last for many years. In essence, the process sets back the natural aging process of a wetland, allowing it to remain a functional feature of the landscape for many years, especially in watersheds protected with permanent vegetation.

Most WMAs and WPAs in the Rainwater Basin region have had portions of their watersheds, or catchments areas, seeded with prairie plant species to slow deposit of sediments. When most areas were acquired, their uplands were planted to a simple mix of grasses such as big bluestem, Indiangrass and switchgrass.

Now, managers are restoring these areas with more diverse prairie plant species, which include many grasses and forbs that benefit a larger suite of wildlife species.

The success of sediment-removal projects can be measured in many ways – increased water storage capacity of the wetland, increased waterfowl usage, a more robust and diversified plant community providing for the needs of many wildlife species throughout the year, or more hunters and birdwatchers visiting the area. Biologists inventoried the vegetation community on several sites before the projects. They will continue to monitor the wetlands as plants reestablish to measure success and to see if the techniques should be modified or if supplemental plantings are needed.

To date, wetland restoration projects

have been completed at 14 of the Commission’s WMAs in the Rainwater Basin. Ducks Unlimited, the Rainwater Basin Joint Venture, the Nebraska Environmental Trust and the North American Wetlands Conservation Act grants and several county road departments have supported the projects. The sediment removal is most easily recognized at Sandpiper and Bluebill WMAs in Fillmore County, Deep Well WMA in Hamilton County and Renquist Basin WMA in York County.

Waterfowl hunters will benefit from sediment removal. These open wetlands are quite attractive to migrating waterfowl and become even more attractive as annual, seed-producing plants such as smartweed and barnyard grass colonize the disturbed soils. Not to mention the fact that there’s less boot-sucking mud. ■



The extent of sediment removal is obvious at Renquist Basin WMA in York County, where wildlife friendly smartweed and shallow water filled an area where heavy equipment had scraped the basin in 2003.

Geocaching

Nebraskans Discovering High-tech Treasure Hunts

By Eric Fowler

With Global Positioning System receivers pointing the way, technology-savvy outdoor enthusiasts explore Nebraska parklands and beyond to find hidden caches.

Armed only with a clue that read “in the tree,” the coordinates N 40° 59.856, W 096° 53.412, and a hand-held Global Positioning System (GPS) receiver, Tom Hoppes and his 11-year-old daughter, Amber, headed down the trail into Branched Oak State Recreation Area northwest of Lincoln. Their mission: Find a geocache.

This relatively new outdoor adventure game, a high-tech treasure hunt of sorts, soon took them off the grassland trail and into a floodplain woodland. That was the direction Hoppes’s GPS receiver told him to go to reach the waypoint he had entered for the cache. And they were not far from it.

On the surface, geocaching, also known as a GPS stash hunt, is a simple game. Searchers use GPS receivers to find caches – usually a waterproof container filled with miscellaneous trinkets – hidden by others who post on the Internet the coordinates they took with their GPS. But this Lincoln father-daughter team has learned it’s not that easy. Consumer-grade GPS receivers can get you close, but their accuracies vary. Reading his receiver, Tom said, “It says we’re right on top of it. Now is where the search starts.”

There were plenty of trees around to look in, but Tom had found enough caches that he figured the large,

gnarled black willow ahead was the likely hiding spot. They looked high and low and searched every crotch, crook and cranny in the tree, but it wasn’t until Tom got down on his hands and knees and peered under a large, broken branch that he spotted the cache – a small Rubbermaid container – in a rotten knothole.

Another mission accomplished.

The Hoppes have been geocaching since early-2002. Others have been doing it since May of 2000. That is when the United States Department of Defense stopped using its Selective Availability program to degrade the satellite signals received by GPS units. By then, hunters, anglers, boaters, pilots, drivers and others had been using GPS as a navigation tool for a few years. Tom Hoppes bought one in the early-1990s. But the degraded signals for security on the military system made it impossible to pinpoint exact locations.

Hoppes said, “When they took it [Selective Availability] off, that’s what opened up geocaching. Before that, accuracy was 200 feet, and it just wasn’t accurate enough.”

Two days after the uncorrupted signal was available to civilians, the first cache was hidden near Portland, Oregon, and its coordinates were posted in an internet newsgroup. Within

days, the cache had been found twice. Soon after, geocaching.com, the self-proclaimed “Official Global GPS Cache Hunt Site,” was launched and the activity took off worldwide.

As of February 6, 2004, the site said 82,663 caches had been hidden worldwide – from Antarctica to Zambia – with nearly three-fourths of those found in the United States. During one week in January, more than 40,000 log entries were made on the site by about 9,000 of the site’s

200,000 registered users. The entries told of new caches that had been hidden or existing ones that had been found.

According to another web site, Buxley’s Geocaching Waypoint (www.brillig.com/geocaching), which consolidates caches listed on geocaching.com and other web sites, another 10,000 caches exist worldwide.

In less than a year the activity reached Nebraska. On March 2, 2001, the state’s first cache was hidden at

Cunningham Lake, an Omaha city park. It remains there and has since been visited 94 times. Another 354 caches have since been hidden in the state, according to geocaching.com. Buxley’s lists an additional 50.

Tom Hoppes stumbled onto the geocaching web site not long after it was launched. At the time, there were no caches in Nebraska. Most were in California, he said. “I put the site in my favorites folder and forgot about it.” Early in 2002, while cleaning his

computer, he found the old bookmark, revisited the site and discovered that 50 caches were hidden in Nebraska. He soon signed up. A year later, the number of caches in the state had grown to nearly 200.

The Hoppes have found 179 caches and hidden four. Most have been in Nebraska, but they’ve stopped at a few others while on vacation. One cache site in South Dakota offered a picturesque view of Mount Rushmore.

While a few caches are hidden on



Tom Hoppes checks his Global Positioning System receiver as his daughter, Amber, closes in on a geocache hidden under a bridge at Wildwood Wildlife Management Area in northwestern Lancaster County.



With the cache bin in hand at Wildwood, Amber looks through the trinkets for something that interests her.

private property – with permission from the landowner – most are located on public land. City parks are popular places to hide caches, as are the hundreds of state parks, recreation areas, and wildlife management areas

owned and managed by the Nebraska Game and Parks Commission.

The first cache at a Nebraska state park was hidden at Platte River State Park near Louisville on June 10, 2001. Named “Cache de la Riviere

Platte,” it has been found 45 times, and was the tenth cache found by the Hoppeses. A flock of wild turkeys almost beat them to it. While they inspected the cache, the turkeys wandered within 10 feet of the Hoppeses, startling Amber when they appeared. Tom took a digital photo (see left) of one of the birds and posted it on geocaching.com.

Such wildlife experiences are part of geocaching’s draw. The activity is a structured invitation to get out of the house, explore new areas and enjoy nature.

“A lot of people hide their geocaches in their favorite spots, so you get into really neat little areas,” Tom said. “We’ve been in some little valleys that you had to almost walk through a tunnel to get into. When you do, you find this little, hidden valley that you’d probably never find otherwise.”

On a hot and sticky summer morning last August, the Hoppeses visited three caches northwest of Lincoln.

On their first search at Branched Oak, they went cross-country – bushwhacking is what geocachers call it. “More often than not, when I go to find these things, I go the hard way and then I discover there is a trail nearby,” he said. This time their trek ended about 30 feet from where the cache was hidden in the willow.

Caches are hidden well enough that someone just walking through an area won’t see it. This also makes caches a challenge to find, another draw to the game. Tom quickly went to the willow at Branched Oak. “After a while, you get an eye for it,” he said. “You look at a place and think about where you’d hide it.”

Had the Hoppeses relied solely on the GPS in this search, they might still be looking. Expensive, survey-grade receivers can be accurate to within a centimeter. Consumer-grade receivers often are accurate to within 10 feet, but they can be off by as much as 100 feet, depending on weather conditions and

terrain.

At the first cache the Hoppeses found a few trinkets in the clear plastic box – a typical cache container. Surplus ammo boxes were once used to hold many caches, but since September 11, 2001, less suspicious boxes are usually left in public areas.

Anyone who finds a cache is welcome to take something from it, but only if they leave something in exchange. Tom said the items are of minimal value, often items found at dollar store. Amber took a coin purse from the cache at Branched Oak, and Tom left a rubber stamp. Participants also are asked to sign a log in the box.

The internal workings of GPS are simple to understand – if you’re into geometry, astrophysics and rocket science. Designed for the military, the first GPS satellite was launched in 1978 and the 24th was positioned in 1994. The satellites are in high orbit, 12,000 miles above the Earth, which allows their low-power radio signals to reach a large area. At least four satellites are within a direct line of sight, or “visible,” from any location on the Earth at any time.

By measuring the time it takes radio waves to travel from the various satellites to the receiver, the instrument determines its location coordinates by using triangulation. The more satellites a receiver can obtain signals from, the more accurate the reading. The signals travel through clouds, although their accuracy is decreased, but not through solid objects. Buildings, hills and dense foliage will block signals from one or more satellites, decreasing accuracy.

Receivers range in price from less than \$100 to \$500 or more. Depending on the model, users can determine their latitude, longitude and elevation, as well as the direction and speed they are traveling. “They can give you more information than you really need,” Hoppes joked.

Like the compact disc, personal computer, internal combustion engine, cellular phone, microwave oven, and other things we use every day, it’s best

to not worry about how it works, only that it does.

On this clear, sunny day, Hoppes was getting a clear signal from eight satellites and his receiver said it was accurate to within 14 feet. Once he stepped into the woods under a canopy of the trees, the signal accuracy was reduced to 50 feet. What complicates matters in such cases is the person who hid the cache might have been dealing with the same interference, which can multiply the error. Your receiver might indicate you are at a precise location, but someone else’s receiver might have placed that location – and their cache – several feet away.

To find some caches, Hoppes has resorted to old-fashioned orienteering – using topographical maps and compasses to navigate the backcountry – which was a precursor to geocaching. In an open space with a good GPS signal, Hoppes takes a reading for the distance from the cache – his waypoint – and compares directional headings between his GPS and a conventional compass. He then paces off the distance to get himself in the right neighborhood. He also uses topographical maps on some hunts, a technique that geocaching organizers recommend. For example, a GPS unit might tell a searcher that he or she is a half-mile south of the cache. But unless it has built-in topographical maps, as some higher-end models do, the user has no way to know when a river or 100-foot-high cliff is in his or her path.

Most caches require some searching. One located on a bike trail northeast of Lincoln is a piece of painted PVC pipe that has been raised on an abandoned utility pole with a rope and pulley. Hoppes said, “I stepped back a bit, turned around and saw it. That one was pretty neat to find. You get out there and you’re hunting around on the ground for something that’s 20 feet over your head.”

Another cache hidden in a Lincoln city park was an ammo can that was held in place with bungee cords in a hole on the underside of a log. “If you can’t find it – don’t let your hope sink. Sit on a stump and it’s closer than

Geocaching on Public and Private Land

While geocaching usually occurs on publicly owned land, not all public areas are open to the activity.

Most land management agencies have abandoned property regulations that allow the agencies to limit or prohibit geocaching. But many agencies allow the activity despite a concern that a sharp increase in the number of seekers at a site might disturb or damage resources the areas were created to protect.

Geocaching.com recognizes the potential for damage that could occur with repeated visits to a cache, and it lists many guidelines. It encourages participants to talk with the management agency before hiding a cache on public land. The site does not list caches placed on historically or culturally sensitive areas or those that are buried. Cache stashers are asked to visit their cache regularly and move or remove it if too much activity damages the environment. Through its “Cache In, Trash Out” program, the site asks participants to “Help clean up our world’s forests one cache hunt at a time” by taking a trash bag to fill on every hunt.

The Nebraska Game and Parks Commission allows placing geocaches in state parks and state recreation areas, with permission of the park superintendent, and at wildlife management areas, but not at state historical parks.

National Park Service policy prohibits geocaches on land it manages.

The policy for U.S. Fish and Wildlife Service lands varies and cachers should ask the area manager before placing a cache. In most cases, only virtual caches are allowed.

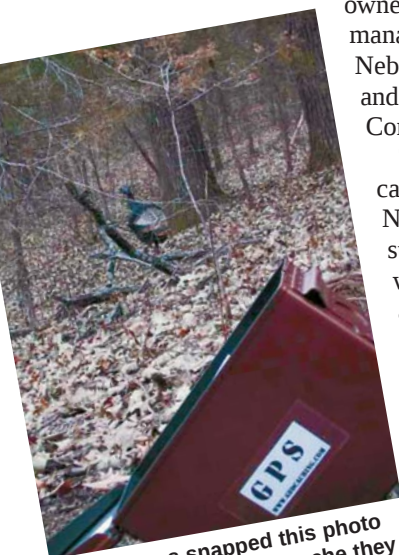
The National Forest Service allows geocaching on all of the land it manages.

Geocaching Web Sites

www.geocaching.com – Geocaching – The Official Global GPS Cache Hunt Site

www.brillig.com/geocaching – Buxley’s Geocaching Waypoint includes caches from three sites, maps and statistics.

www.getlostne.us/ – Get Lost in Nebraska, a local forum for Nebraska cachers.



Tom Hoppes snapped this photo of a wild turkey near a cache they found at Platte River State Park.



Tom and Amber head down a trail toward a cache at Branched Oak WMA near Lincoln.

you think,” read the clue posted on geocaching.com.

Others are smaller – much smaller – microcaches. One was a barrel of a ballpoint pen stashed along a bike trail in Lincoln. That one confounded Hoppes and others for some time before he was able to find it. “I kept getting these readings that I was two feet and four feet from it and there was nothing there,” he said. “I walked along with my foot and started moving the sod over and sure enough there it was. That thing had sat there for quite a while. I was lucky.”

Another microcache Tom found was a magnetic key holder stuck on the

underside of a mailbox in downtown Hastings. These caches contained nothing but a piece of paper as a log. “They can be pretty tricky,” he said.

The second cache of the day took the Hoppeses a few miles north of Branched Oak and was far from tricky. It was hidden at Wildwood Lake Wildlife Management Area, a Lower Platte South Natural Resources District property managed by the Commission.

Because the area was closed to vehicles during a project to rehabilitate the lake, Tom parked at the gate and they walked down the road. Tom said on most days Amber would grab his GPS and run ahead to find the cache,

especially if her cousins were along. “If you have a group of kids, then it becomes a lot of fun. They grab the GPS and go running out in front of you, having a contest between themselves.”

The GPS receiver guided them to a bridge that crosses an arm of Wagon Tongue Creek, which feeds the flood-control reservoir. On the other side of the bridge, the receiver said they were again on top of the cache. This time, they literally were. Amber scrambled down the steep bank next to the concrete bridge supports, reached under the bridge’s framework and pulled out a plastic container covered in camouflage duct tape.

She rifled through the contents and gathered her prize – a Sacagawea golden dollar. She smiled and drank a soda pop as her dad filled out the log. “She finds most of them,” Tom said. “She likes finding money.”

The treasure at the end of the hunt is not always a box of trinkets. Virtual caches give coordinates to special places and they literally can be found in most corners of the state. These include a cast-iron marker erected in 1854 on the bluff above the Missouri River, a mile from the southeastern corner of the state. The marker sits at 40 degrees north latitude – the border between Kansas and Nebraska – and marks the “Point of beginning of the public land surveys of the sixth principal meridian.” From there, government surveyors went on to lay out the section, township and range grid work in Nebraska and Kansas, as well as parts of Colorado, Wyoming and South Dakota.

That survey also probably located the points for three more virtual caches – markers that denote the southwestern corner of Nebraska, where it meets Kansas and Colorado; the northeastern corner of Colorado, where it meets Nebraska’s Panhandle; and the Panhandle’s southwestern corner, where it joins Colorado and Wyoming.

Virtual caches also take searchers to historical sites. The Hoppeses visited one cache in Lincoln’s Wyuka

Cemetery. The online clue for that cache read:

This place creates some eerie feelings.

Free from bars, and free from ceilings.

While roaming this row, there is no talking.

Shhh ... did you hear that? There’s a dead man walking.

The clue also tells geocachers they shouldn’t go if there is fresh snow, as to not give others a trail to follow. “The weather is a killer,” it said.

Hoppes said the cache is the grave of Charles Starkweather, who was convicted of 11 murders in 1958 and executed in Nebraska’s electric chair the following year. Tom said it was an eerie find on a dark and dreary day.

Those visiting a virtual cache typically are required to find a clue and report back to the individual who created it for verification. On the other side of the world, people who visit a virtual cache on top of Kala Pattar, an 18,400-foot peak in the shadow



Clues to a cache at Wildwood WMA lead the Hoppeses across a bridge spanning Wagon Tongue Creek.

of Nepal’s Mount Everest, are asked to post a photo of themselves with Everest in the background. Four people have “found” the cache since it was listed last May.

Caches in Nebraska do not require that much effort, but some involve a hike of a mile or more. Tom and Amber walked about a half-mile to find their third and final cache last August. It was at Redtail Wildlife Management Area in southeastern Butler County, and was hidden under a cedar tree in the middle

of a grassland.

“I didn’t know it [Redtail WMA] was here,” said Tom.

Amber took a diary and Tom a mini-level from the cache. They left a CD-ROM computer game and a pair of miniature binoculars, and talked about returning to the lake to fish.

They were three-for-three that day. That’s not always the case. Tom said he doesn’t find about five percent of the caches he searches for. “Around here, I’m persistent and keep going back until I find them,” he said. “But when we’re on vacation, lost in the Black Hills, walking up and down hills for three hours, you just give up.”

There are other twists to this high-tech game. Some race to the cache in organized geodashing events. Multi-caches take participants to one location, where they then receive instructions or clues to get to others. A travel bug is a tag attached to an item with a few instructions. Finders move items with travel bug tags to new caches, and then record the new locations on a web site. The senders of these travel bug items set goals for each one, such as a route around the world, across the country or to a specific cache, and they can track the progress on the web site.

These twists challenge techies like the Hoppeses. “GPS receivers are pretty neat little toys,” Tom said. “I like the technical part of it, the map reading. There’s a little orienteering involved with it.

“And I like being with my daughter.” ■



Amber searches through the goodies in a cache found at Redtail WMA in southeastern Butler County as Tom prepares to fill in the log book.

Bringing Back the Whites

Photos and text by Rocky Hoffmann

Native to Nebraska waters, white bass were plentiful and a favorite of anglers at Lake McConaughy and downstream reservoirs until the species declined in the late-1980s. Armed with better understanding of the habitat needs of the species and improved production techniques, hatchery workers hope to increase white bass populations once again.

Like the fragrance of wild plum blossoms or the distant, haunting gobbles of a winter-hardened tom, an angler in a sun-warmed stream casting for spawning white bass is a signature of spring. Spring casting for whites has been a Nebraska tradition ever since the state's first reservoirs were constructed, and for many anglers white bass fishing is the bread and butter of their sport, spring, summer and fall.

The heart of the action has been at the Platte River Valley reservoirs led by Lake McConaughy, which is linked by 150 miles of canals and rivers to six downstream impoundments. Lake Ogallala and Sutherland, Maloney, Jeffrey, Johnson and Elwood reservoirs are fed by Lake McConaughy, and significant numbers of fish are sucked through Kingsley Dam and eventually end up in these downstream reservoirs. The disappearance of white bass from the creels of anglers

at Lake McConaughy in the 1990s signaled a gradual reduction in the species's numbers in downstream reservoirs. The loss of white bass, which was caused by a combination of events, disappointed many who remember their abundance in past decades.

White bass are the only temperate bass native to Nebraska. Temperate bass include white perch, white bass, striped bass and wipers, which are white bass/striped bass hybrids. Largemouth and smallmouth bass are actually members of the sunfish family. Written accounts dating back to 1880 note the existence of white bass in Nebraska. Their abundance was also recorded in documents that counted 1,000 pounds of white bass taken from the Missouri River for commercial sale and 450 pounds caught from the Platte

SPRING CASTING for white bass in inlets of Platte River reservoirs has been a tradition for more than 50 years.

in 1894. White bass were not recorded inhabiting western portions of the Platte or North Platte rivers before Euroamerican settlement, but they were introduced into those waters soon after Kingsley Dam was built to create Lake McConaughy. The earliest stocking record indicates that 39 one-pound white bass from Iowa were stocked in Lake McConaughy on May 21, 1944, and that 121 more mature fish were stocked three years later. By 1951, Lake McConaughy produced terrific white bass fishing. Conservation officer Loron Bunney estimated that 90 percent of anglers at McConaughy took bag limits of white bass that year. He reported, "Two white bass on one line was common," and he reported seeing one fisherman landing three white bass on three hooks at the same time.

White bass won immediate popularity among anglers. Boats were few during Lake McConaughy's early years, but even anglers without boats could stand on rocky points of the south shore, wade the sandy beaches to the north, or negotiate the rocks and jacks along the dam and catch plenty of white bass. Anglers who had boats did not need the sophisticated, expensive gear prominent on today's walleye boats. In the early-1970s, two jigs on a spinning rig would still catch two white bass at one time. File the barbs off the hooks, flip the catch into an open cooler, and it did not take long for everyone in a boat to catch their limit.

The white bass population had setbacks. In the fall of 1972 and the spring of 1973, a blue-green algal bloom killed many fish. The normally colorless, clear water in Lake



DUANE RAEVER / USFWS



WHITE BASS, *Morone chrysops*, were documented in the Missouri and lower Platte rivers as early as the 1880s.

McConaughy turned John Deere green, and thousands of fish floated to the surface. The most noted game species lost to the algae was the white bass, but the species recovered. In the mid-1980s, the white bass population was as strong as it had ever been, and so too was the angling population. The limit had been reduced to 15 to reduce the pressure on the popular game fish, but even with conservative limits, one young entrepreneur at a lakeside resort cleaned 20,000 fish, mostly white bass, in a single season for 15 cents per fish.

White bass populations are cyclical by nature. The

species commonly produces one or two large year-classes followed by five or six years of small year-classes. The strong year-classes were often so generous that they supplemented the entire Platte River reservoir system. When Lake McConaughy produced a bonanza of white bass, fishing was usually good a few years later at downstream reservoirs. The reverse was also true: When Lake McConaughy was at the bottom end of the white bass cycle, fishing tended to taper off downstream, too. But white bass in Lake McConaughy always regenerated its population, solving problems in the other lakes.

So, after the white bass cycle hit bottom in the late-1980s, why didn't another strong cycle follow? Darrol Eichner, who supervises fisheries management for the Nebraska Game and Parks Commission in southwestern Nebraska, said, "Two primary events affected the recruitment of white bass at Lake McConaughy, low river flows and the introduction of alewife."

Eichner said Lake McConaughy's white bass spawn in late-May, which is much later than the species spawns in downstream reservoirs or in the Republican River Valley. As water temperatures approach 60 degrees, males move into the reservoir's headwaters and stage for the arrival of females. Males become sexually mature at two years of age, and females at age three. The arrival of males at spawning areas creates the first important white bass fishing opportunity in spring, and fishing improves when water temperatures reach 65 degrees and the females arrive. White bass don't always spawn in river situations, but when spring flows are high at the time of a white bass spawn, reproduction often improves dramatically.

"High river flows and high lake levels are prerequisites of top production years," Eichner said.

A textbook example occurred in May 1983, when high flows in the North Platte River above Lake McConaughy provided perfect spawning conditions for white bass. Coupled with a strong production of gizzard shad the same year, the spawn produced a colossal year-class of white bass. Surveys indicate that anglers caught 115,000 white bass in 1984, and the catch jumped to 403,000 in 1985. In 1986, the catch's weight dramatically increased, with limits often totalling in excess

BRYAN SWEET, superintendent of the North Platte Hatchery, strips eggs from a female white bass. Females are injected with a hormone to induce ovulation within 20 hours.



HATCHERY WORKERS collect spawning white bass from the inlet of Sutherland Reservoir in May. Dirk Higgins (left) and Bryan Sweet handle the nets while Steve Brezenski maneuvers the boat in fast water.

of 50 pounds. Anglers took well over a million white bass, weighing more than 250 tons, from the 1983 year-class.

By the time white bass were expected to cycle another bonus hatch, the High Plains was suffering an extended drought, which worsened in recent years. Occasional high lake levels and adequate river flows have temporarily interrupted the prolonged drought pattern, but white bass have not had a good year-class in recent years.

"It's true that high river flows and high lake levels are prerequisites for successful white bass spawning, but high water years do not always mean successful reproduction and recruitment," Eichner said. "There are so many other factors that can influence the success of production. White bass eggs are small and fragile, and so are the fry. They are also extremely temperature sensitive. If a cold front should sweep in before, during or after the hatch, an entire year's production could be lost. Cold fronts in May are common in western Nebraska."

Eichner said that the introduction of alewife in 1986 might have permanently affected white bass production. He said, "It appears that as long as alewives are in the reservoir in large numbers, white bass will not be able to produce large year-classes."

Eichner said alewives prey on white bass eggs and fry, and the white bass that escape predation find little to eat because alewives compete directly with them for zooplankton. "A white bass must grow to about 1¼ inches before it becomes too big to be eaten by an alewife, but it can't grow because there are no zooplankton left to nourish

that growth.

"It's hard to be so critical of alewife, when you look at the growth they have put on the lake's walleyes. We have spectacular walleyes that are nationally significant, and that's been the direct result of alewife utilization. We encountered a similar spawning dilemma with walleyes in the lake after we introduced alewife, but we were able to solve the problem through hatchery culture. Most of McConaughy's walleyes are now the result of stocking fingerlings hatched at Game and Parks hatcheries. Although alewife numbers appear to be down, stocking fingerling white bass is the route that we are currently taking to establish white bass year-classes," Eichner said.

Bryan Sweet is the superintendent at the Commission's North Platte Fish Hatchery, and he and his staff are responsible for meeting the annual stocking requests for white bass. When asked about the species, Sweet shook his head and admitted, "There is no other hatchery responsibility that we do more by feel than the production of white bass. They are difficult to produce, but the learning curve is improving and we're getting good results most years."

Hatchery personnel have succeeded in raising young white bass through hard work and extensive experimentation. Their first attempts to produce white bass began in 1988 as a side product to producing wipers. In the initial white bass program, hatchery biologists produced fry that were stocked about five days after hatching. Because few fry survived, the program did not improve the Lake McConaughy fishery, but it gave the hatchery's fish culturists valuable experience in

Anglers are beginning to enjoy the results of an intensive hatchery program that might ensure the future of a fishing resource that has been a long tradition in west-central Nebraska.

developing white bass hatching techniques.

Later attempts to stock white bass as fry also failed. Nearly 15 million white bass fry were released into Lake McConaughy in 1993 and 1995. Survival was apparently poor; both year-classes remained small. More than six million fry died in 1993 when a cold front moved in on May 10 while the last shipment was stocked. In 1995 more than eight million fry were probably lost to another temperature crash that occurred on May 29. Biologists now speculate that had the weather remained mild neither year-class would have been especially productive because of competition and predation from the large alewife population.

Managers decided that white bass fry must be raised in the hatchery to at least 1¼ inches to survive when released into Lake McConaughy. The millions of tiny fry, which were once stocked directly in Lake McConaughy, are now put into hatchery ponds until they are large enough for stocking. However, temperature dips in hatchery ponds are just as damaging as in Lake McConaughy, and there is nothing that hatchery workers can do to prevent thermal

shock due to weather events.

Hatchery personnel collect male and female white bass from the inlets of Lake Maloney and Sutherland Reservoir in May, when the bass concentrate to spawn. Workers use electrofishing techniques to collect the fish, and anglers sometimes donate their catches to the hatchery program.

Sweet said, "There is a very narrow window of opportunity for us to collect spawners. We have to really stay on top of the situation, because if we get a rapid spike in water temperature, white bass will move in very quickly to spawn."

The collected fish are immediately transferred to circular holding tanks at the hatchery where the sexes are separated. Salt is added to the water to replace lost electrolytes because of stress from handling. When biologists are ready to take the spawn, they gradually warm the water in the holding tank. As the water temperature approaches 65 degrees Fahrenheit, females are individually injected with 200 international units (IU) per pound of human chorionic gonadotropin (HCG), a hormone that induces ovulation within 20 hours. Biologists hope that a large number of the injected females will ovulate at the same time, allowing hatchery workers to collect millions of eggs at once.

Sweet said that it is important for hatchery workers to be ready to take the eggs when a female ovulates. For that reason, eggs are inspected regularly after the females are injected with HCG. A glass catheter is inserted into the egg mass inside the female, and several eggs are extracted and examined under a microscope. Certain characteristics of the eggs indicate their stage of development, telling biologists how many hours until the fish ovulates.

According to Sweet, "White bass eggs are extremely tiny. They average about 1.2 to 1.4 million per quart. As a comparison, about 130,000 walleye eggs will make a quart. It might take as many as six females to acquire a quart of eggs, and we generally use three or four males to ensure fertilization."



HIGGINS prepares eggs for the hatching battery at the North Platte hatchery. Nearly 1.5 million white bass eggs fit into a quart.



CAL HUEBNER (left) and **Virgil Burris** of Hershey follow gulls that tell them where schools of white bass are in Lake McConaughy. White bass chase shad to the surface, where the gulls feed on them.

Eggs are mixed with fuller's earth solution, a fine clay and water mixture that prevents the eggs from sticking together. By tradition, the fertilized eggs and fuller's earth solution are stirred with a feather because it causes less damage than any other stirring device. The fertilized eggs are put into hatchery jars and placed on a hatching battery that circulates temperature-controlled water through the jar. The white bass eggs hatch in about 48 hours, and the fry feed on nutrients contained in their yolk sacs for about five days, at which point they must be transferred to hatchery ponds or they will starve.

Sweet said this is a critical time. "If the weather has been cold or suddenly turns cold, we'll likely lose all of our production, but if we hold them inside, we'll lose them regardless."

Hatchery ponds are filled with water just before receiving fry. "That keeps the plankton small enough to be eaten by the tiny fry. The problem is that a freshly filled pond may not be as warm as one that has been in the sun. This is a double-edged sword. If we warm the ponds up too early, we grow the plankton to a size that is too large for our bass to use. If we put the fry in water that is too cold, they will die," Sweet said.

"On the plus side, water chemistry is perfect at the North Platte hatchery, and plankton are plentiful. It takes about 30 days to grow the fry to the desired 1¼ inches necessary for stocking, and at the end of a month's time, our ponds have run out of groceries. The fingerlings have to be stocked, ready or not. By then, however, we're well into the latter days of June, and cold fronts are rare. We will likely have good success once we release them into the wild, but we have to have good survival in the ponds."

Sweet considers 20 percent survival from fry to fingerling to be a successful production year. That is a low goal compared to other species. In the hatchery's ponds a 50 percent survival rate for wipers, which are also difficult to raise from fry to fingerlings, is considered a success. But wiper eggs and fry are not nearly as small or as fragile as those of white bass.

Because of the skills of the Commission's hatcheries in producing fingerling white bass, managing this temperate bass in reservoirs that contain alewife populations has become much easier. Anglers are beginning to enjoy the results of an intensive hatchery program that might ensure the future of a fishing resource that has been a long tradition in west-central Nebraska. ■

Take Pride in America Day

Volunteers sought to improve lakes, parks and wildlife areas on May 15.

By Tom Keith

On May 15, conservation groups, school children, Boy and Girl Scouts, and interested individuals will have the opportunity to join the Nebraska Game and Parks Commission in improving lakes, parks and wildlife management areas across the state, as part of the national Take Pride in America program.

Governor Mike Johanns has directed Nebraska Game and Parks Commission Director Rex Amack and his staff to organize activities to improve targeted parks, state recreation areas and wildlife management areas.

"Nebraskans take great pride in our natural resources," Amack said. "Volunteer partnerships extend the hand of stewardship across the state, creating a greater appreciation and awareness of our precious resources."

Each year the Commission relies on dedicated volunteers representing conservation organizations such as Pheasants Forever, the National Wild Turkey Federation, and Ducks Unlimited, as well as gun clubs, hunting, boating, fishing and Project Wild instructors, and countless other volunteers for services to enhance and broaden Nebraska's conservation efforts. Many of these efforts will be focused in May as part of the Take Pride in America program.

The Take Pride in America program was conceived by Don Hodel, who served as Interior Secretary and Energy Secretary in the Ronald Reagan administration. During his 1986 State of the Union Address, President Reagan called on all

Americans to share in the responsibility of protecting public lands by volunteering their skills, talents and efforts.

In 1989, Congress enacted the Take Pride in America Act, which provided for productive cooperation between governmental agencies and the general public to accomplish needed enhancements in our parks, refuges and wildlife areas.

From 1989 to 1992, the Take Pride in America program was credited with generating more than 12 million

efforts. Nebraska's parklands have many needs, including cleaning debris, painting, carpentry work, and habitat planting. The activities on May 15 will vary at each location. In some areas, volunteers will focus on readying the facilities for the summer season.

Projects are currently planned for 35 locations in 19 Nebraska counties across the state. Those counties are Dawes, Scotts Bluff, Sheridan, Cherry, Custer, Dixon, Stanton, Platte, Lincoln, Frontier, Lancaster, Johnson, Buffalo, Hall, Kearney, Jefferson, Thayer, Richardson and Dodge.

"We appreciate the efforts of those who will volunteer to help us on May 15," said Suzanne Ridder, a manager in the parks division who is coordinating the Take Pride in America program in Nebraska. "In addition to knowing they have done something to improve the state's public wildlife and recreation areas, each volunteer will personally benefit by getting to know the area where they work that day and will develop a feeling of ownership by working to improve it. A lot of people aren't aware of the beautiful public lands and recreational

opportunities that are available to them in their own area.

"We encourage everyone to participate and hope families will take part in the activities. The only restriction is that we require anyone under age 16 be accompanied by an adult," Ridder said.

To participate or learn more about the scheduled activities, call the Commission at (402) 471-1623, or visit its online web site at www.outdoornebraska.org. ■



Volunteers Mark and Holly Peterson and their daughter, Heidi, of Fort Collins, Colorado, plant a pine seedling at the site of the 1989 wildfire at Fort Robinson State Park.

volunteer hours, which translated into far-reaching improvements for the nation's natural resources and scenic areas, and a savings of more than \$140 million to local, state, and federal governments.

On May 15, scouts, school groups, conservation organizations, service organizations and the general public are invited to gather at specified lakes, parks and wildlife management areas to lend their time and talent to enhance the state's conservation

Spring Turkeys

Tips to improve your hunting skills and to increase chances for success.

By Jeff Rawlinson, Outdoor Education Specialist

Since its reintroduction into Nebraska in 1959, the wild turkey has become one of the state's most popular game species. Current regulations allow every hunter to purchase up to two spring turkey season permits, and the state's turkey population is at an all-time high. For outdoor enthusiasts new to turkey hunting, this is a great time to learn the sport. Here are some tips to get started.



A tom displays during the spring mating season.

Equipment

Although gun makers offer dozens of different models designed especially for turkey hunting, any 20-gauge or larger shotgun will work. Shot sizes No. 2 through No. 7 are legal for hunting turkeys in Nebraska, but sizes No. 4 through No. 6 provide the best combination of knockdown power, pattern density and shot size.

Pattern your shotgun and choose your load before hunting. Your shotgun, choke tube and shot shell combination should provide an 80 percent or better pattern density in a 30-inch circle at 30 yards.

Next to a shotgun, a turkey call is probably the most important piece of equipment when hunting turkeys in the spring. Dozens of turkey calls are available, but box calls are among the easiest to learn to use. Listen to wild turkeys, experienced callers, or an instructional tape to learn what sounds to make.

Although turkeys have no sense of smell, they have keen eyesight and can see colors, so camouflage is important. Make sure to cover your face, hands and any shiny parts of your equipment.

Decoys are not a necessity when hunting turkeys, but they often bring a tom closer. The two decoy types most commonly used, either together or separately, are jakes and hens. A

jake, or young male, decoy incites a territorial response from mature toms, and hen decoys elicit mating responses. A jake decoy should be positioned to face the hunter and a hen decoy should face away to take advantage of how gobblers approach each type. Place decoys well inside a hunter's effective shooting range because toms often stop just beyond decoys when coming to the call.

Scouting

Scouting for turkeys before and during the hunting season is a key to success. By finding out what areas the turkeys are using at different times of the day and the routes they take from place to place, a hunter can plan where to set up.

One of the best ways to bag a gobbler is to locate a roosting area. By using a locator call in the evening, such as a crow call, a turkey hunter can pinpoint where a tom is roosting. By sneaking close to the roosting area early the next morning and calling softly before the birds leave the roost, a hunter can often call a tom to within shooting range.

Strut zones, areas where toms display for hens, can also be excellent locations to set up.

Find these areas by scouting and observing strutting activity from a distance, or by looking for wing drag marks on the ground and turkey droppings in open areas of good habitat.

The Hunt

Select a spot to call from that has a wide field of view and offers a place to hide. The shady side of a large tree that breaks up a hunter's outline is often a good choice. After setting up decoys, sit tight and move as little as possible while sending out love notes on your call.

You should have your gun up and in position before a turkey approaches your location because they pick out movement extremely well. Any last-minute adjustments necessary for proper aim should be made slowly or when the turkey has its back to the hunter. When you have a clear shot and the bird is within range, aim for its head for a quick kill.

These tips should improve your hunting, but a word of warning: Spring turkey hunting can be highly addictive, so plan on enjoying a lot of springtime fun. ■

Turkey Hunting Safety

- Always be aware of where the muzzle of your gun is pointed.
- Never shoot until you can positively identify the entire target.
- Never stalk a tom during the spring season.
- Avoid wearing red, white and blue colors while hunting.
- Avoid using decoys in heavily hunted areas.

ANNOUNCEMENTS

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ATTRACTIONS/EVENTS

UNL WILDLIFE CLUB STUDENT AWARDS BANQUET, Lincoln, Nebraska. East Campus Union. Speaker: Mark Gocke, Jackson, Wyoming. Guest of Honor: Howard Wiegars. 6 p.m. April 17, 2004. Tickets are \$18 in advance. E-mail wildlifeclub@yahoo.com or call (402) 472-2188.

BOOKS/PUBLICATIONS/VIDEOS

IN THE SHADOW OF THE BLUFF, just published novel about migrant life; Scotts Bluff locale; \$14.50 ppd. Betty Heidbreder Dunn, 410 County Rd. 324, Navasota, TX 77868-9706.

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FOR RENT (\$650/month) OR FOR SALE (\$65,000). Three-bedroom house at Lake McConaughy. Detached two-car garage. Call (402) 768-2113 or (308) 355-7531.

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Improvements Greet Campers at Merritt

Electrical hookups, showers, longer boat ramps make lake more accessible.

By Rocky Hoffmann

Electrical hookups, extended boat ramps and other improvements will greet visitors at Merritt Reservoir State Recreation Area this spring. The 28 new camping pads that offer 20-, 30- and 50-amp service are the first electrical hookups on parklands surrounding the scenic Cherry County reservoir.

The modern camping facility was constructed at the Cedar Bay campground, which is centrally located three miles south of the dam on Nebraska Highway 97. The installation of 50-amp service is necessary for motor homes and other large campers that are equipped with two air conditioners. Eight pads offer the 50-amp services. A modern shower building that is wheelchair accessible and approachable on a wide concrete walkway was built in conjunction with the new camping facility.

A total of eight camping areas, providing 200 campsites, are located along the shore of Merritt Reservoir. All are primitive campsites except for the Cedar Bay Area. Each campsite has a picnic table, and each camping area has a picnic shelter. A trailer dumping station is located near the concession area at the dam. At capacity, Merritt Reservoir State Recreation Area can provide facilities to about 600 campers.

The welcome news for boaters and anglers is that two of Merritt's five boat ramps were extended and widened during the lake's drawdown. Merritt is an irrigation reservoir with fluctuating water levels. In the past, low water has left boat ramps high and dry by late summer. The Cedar Bay and Beed's Landing ramps were extended to allow continued access to the lake during low-water periods. Both ramps were also doubled in width to permit launching two boats



ERIC FOWLER

Walleye fishing is popular at Merritt Reservoir. With new improvements, this scenic Cherry County recreation area will provide services to more campers and anglers.

simultaneously. Each ramp has two boat docks to accommodate extra traffic when the water is low. The double ramps and docks will help expedite launching during fishing tournaments and on busy holiday weekends. Three other boat ramps, located at the Powder Horn, Main and Snake River areas, are not intended for low-water use.

A concrete comfort station was installed at Beed's Landing. The comfort station is wheelchair accessible, and a wide ramp connects the comfort station, boat ramp and fish cleaning station. A second fish cleaning station is located at the Main area near the concession. Merritt's fish cleaning stations get a lot of use, because the reservoir offers some of Nebraska's premier fishing. It is a deep lake with excellent inflow from the Snake River and Boardman Creek. Walleye, crappie and white bass have been the lake's mainstay species.

The fee for primitive campsites is \$4 per night. The improved sites with electricity in the Cedar Bay Area are \$11 per night. Camping is

first-come, first-served, and stays are limited to 14 consecutive days during any 30-day period. A valid Nebraska State Park Entry Permit is required for vehicles entering Merritt SRA. Loren Murray is the superintendent and Steven Schiltz is the Groundskeeper Leader. For more information call (402) 376-3320, or e-mail valmaint@ngpc.state.ne.us

Merritt Dam Trading Post is located at the eastern end of the dam. The area concession provides permits, fee camping with RV hookups, modern cabins, guide service, boat rentals, groceries, bait, tackle, fish freezing and fuel. ■



Merritt Reservoir State Recreation Area is located 26 miles southwest of Valentine on Nebraska Highway 97. The 2,900-acre lake is surrounded by 44 miles of shoreline. McKelvie National Forest is north of the lake.



STRAND

My father, Joe Strand, was one of these hunters in this coyote roundup in Kearney County in 1908. The hunt took place on a ten mile diameter circle northwest of Minden. The main targets to shoot were coyotes and jackrabbits.

— Russell Strand,
Hemet, California



MOUSEL

In a picture taken in October 1964, my father-in-law, Kenneth Larson of Gering, is shown with a deer he shot with bow and arrow in southeastern Banner County. He was the only person in Banner County to hold an archery permit that year, giving the county a 100 percent success rate. He farmed and ranched in Banner County and loved country life and the great outdoors, especially deer and pronghorn hunting. I learned a great deal from him, and return every fall to hunt many of the same areas he did. Kenneth died in January 2002 and we miss him dearly.

— Scott Mousel,
Juniata, Nebraska

Send contributions to: Portraits from the Past, *NEBRASKAland Magazine*, P.O. Box 30370, Lincoln, NE 68503-0370. Photos should show people enjoying Nebraska outdoor activities, such as camping, boating, hunting or fishing, and must have been taken before 1970. We will give priority to unusual photos or activities. When possible, please include a story about the photograph and identify the people, places and approximate date it was taken. Photos will be returned.

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