

THE RIVER OTTER JOURNAL

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Otters keeping busy with an orange at John Ball Zoo in Grand Rapids, Michigan.

Photo by Jan Reed-Smith

Keeping Otters Busy

by Amy Harris

Editor's Note: Amy Harris is a keeper at the John Ball Zoo, located in Grand Rapids, Michigan.

Animal Enrichment is anything that introduces variability in an exhibit. It is a very important component of animal husbandry. Otters are no exception.

At John Ball Zoo, the enrichment committee has developed a North American river otter enrichment plan which consists of 45 enrichment items. During the development of this plan, issues were addressed such as the enrichment item itself, safety, and the frequency each item could be used. Every keeper had input. The plan was designed for easy use, aimed towards use by all otter keepers on a more consistent basis. This makes enrichment a part of a keeper's daily routine.

The enrichment plan included behaviors that we want to elicit and behaviors we wanted to modify. Behaviors to elicit



Night den for John Ball Zoo otters.

Photo by Jan Reed-Smith

were an increase in hunting, grooming, marking, playing, and sliding. Sand eels, fish juice trails, and crickets were placed in the exhibit to elicit hunting behaviors. Coon urine, spices and new logs promote marking. Phone books, boomerballs, hammocks, and non-fraying rags were targeted towards play. These were a few items in the enrichment plan. Some of the other items helped to modify undesirable traits such as foot carrying in the female and excessive sleeping by the male. By using enrichment items, we are stimulating natural behaviors. Thus, enrichment enhances the zoo visitor's experience.

The enrichment plan has been designed to aid in monitoring and evaluating the success of the plan.

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THE RIVER OTTER JOURNAL is a semi-annual publication of the River Otter Alliance. Look for the next edition of THE RIVER OTTER JOURNAL in Spring 1999!

River Otter Alliance Mission

The River Otter Alliance promotes the survival of the North American River Otter (*Lutra Canadensis*) through education, research and habitat protection. We support current research and reintroduction programs, monitor abundance and distribution in the United States, and educate the general public through our newsletter, THE RIVER OTTER JOURNAL, on the need to restore and sustain River Otter populations.

Our goal is to be a center of communications among wildlife biologists, environmental organizations, fishermen, and all interested otter lovers on a national and international basis, in order to ensure the healthy future of the North American River Otter.

Our goal must be to give a high quality of life to the animals placed in our care, and to give those animals an environment that fulfills those needs. Animal enrichment aids in the achievement of that goal.

President's Message

My favorite time of the year has returned, autumn. The colors from nature's palette have been spread across the countryside to fill our visual senses with unsurpassed beauty. Many changes in the faunas' cycle of life are another reason this is such a special time of year. Some of our avian species are heading to warmer climates and leaving us 'snowbirds' behind. Many of the larger mammals are also starting their downward descent from higher altitudes to search for food while others are stashing it in preparation for the long winter ahead. What about the otters? Since they don't migrate or hibernate, they, like we snowbirds, continue their active life as usual.

In this issue I am sharing a synopsis of my five-year report with you on the research I conducted from July 1992 through June 1997 on river otters in the Colorado River headwaters and surrounds.

I would also like to share with you a different otter-related experience I had this past summer. A friend, Barbara Mancuso, and I co-taught an otter class



Judy Berg

for 12 young people, ages 7 to 13, and their school counselors. Barbara is a seasonal interpreter for the west side of Rocky Mountain National Park who specializes in teaching young people about the wonders and complexities of nature and she is really good at it. Our class was a very 'intense' and active four-hour period. We educated and we played. Barb had made a fun board game, in which frogs had to escape otters; food boxes containing hidden food items; and an educational relay race. I provided illustrated talks and initiated discussions. We both led them to various otter- and beaver-related discoveries on our field trip. The children enjoyed everything we provided, including our one indoor activity. They became very enthusiastic about picking through dried otter scat and making discoveries into the otters' diet. So, you see, my work on the otters' diet has been bringing out the kid

in me too. I wonder if the adult class I will teach next summer will have the same enthusiasm when they pick through otter scat? Barb also put together an educational notebook on otters for them to continue their learning experience and also become detectives in nature by tracking them. Now, thanks to ROA, these children will be published authors in our River Otter Journal. Please see the separate article, "Otter Tale," which they put together during our class.

I continue to share information with you, as have the authors in the other articles, so now we would like you to share with us. Remember, it can be from a few words to many! We of the River Otter Alliance like diversity in our Journal, as I am sure all who read it do too. Dr. Claudio Gnoli of Italy will be writing an article for our next Journal and we encourage others of the international community to do likewise. We received a nice newsletter from Friends of Otters in Nago, Japan who also want to share with us. If anyone can read Japanese, I will make a copy for you. Sharing, caring, and educating is what we are all trying to do for our otter species. Please become involved through your membership, your input, and your comments. You Too Otter Make A Difference!

— Judy Berg, President



Feature Photo: River Otters in Grass at Yellowstone National Park

Photo by Nathan Varley

Research Summary

by Judy Berg

Editor's Note: The following is a synopsis of the Five Year Report on River Otter Research conducted by wildlife researcher and ROA President Judith K. Berg on the headwaters of the Colorado River and Surrounds.

The North American river otter, *Lutra canadensis*, was reintroduced into the headwaters of the Colorado River between 1978 and 1984, after it was determined to be extirpated from Rocky Mountain National Park and declared a Colorado state endangered species. The purpose of the current project was to survey this reintroduction site throughout the seasons to determine if the otters were continuing to use the area, and to collect and analyze scat to determine the otters' diet.

STUDY AREA. My study area comprised a 26-kilometer "straight" stretch of the headwaters of the Colorado River, its tributaries and major drainages in Rocky Mountain National Park, and waterways in adjacent sections of the Arapaho National Forest in the state of Colorado. The terrain was mountainous with valley habitat ranging in elevations from 2,530 meters to 2,750 meters. The riparian vegetation along this portion of the Colorado River system is classified as shrub/grass. There were also stretches of lodgepole pine with either dense or sparse understory components. The temperatures during trekking ranged from -25° to +25° Celsius.

The most abundant fish found in this portion of the river and its drainages are represented by four families: Salmonidae, Catostomidae, Cyprinidae and Cottidae (Mack, 1985). There are various other vertebrates and invertebrates—including crayfish—in the study area.

PROCEDURE. The study was conducted using a naturalistic approach of walking the study site throughout the seasons. A total of 1,652 field hours

were spent in the study area from July 1992 through June 1997. Scat was collected where found from April into December, 1993 through 1996. Due to snow conditions it was rarely found during the winter months of January through March. (Refer to Berg, 1998a and 1998b for more details on methods and analysis). Information on sightings and signs came from the researcher and from input by visitors to the Park and nearby residents, as taken by volunteers and staff of the west side of the park.

SIGHTING RESULTS. There were 17 areas in or adjacent to the west side of Rocky Mountain National Park where otters were found during at least two of the five-year period. There were 130 reported sightings. Signs were found in 12 of these locations. (Note: an area or location can encompass a two to three-mile stretch along a watercourse.) Sixty-seven percent of these sightings came from waterways (the river, its tributaries, creeks, and wilderness lakes) where there was limited human access and in which no motorized boats occurred, as compared to 33% of the sightings which came from four recreational lakes. Recorded times given with sightings spanned all hours of the day, from 0600 to 2100. Thirty-two percent of the 96 reported times occurred between 0600 and 0900. The remainder were relatively evenly distributed when looking at them in three-hour segments.

During the months of April and May there were eight sightings of two to six otters. Melting of ice on the waterways is occurring during this time period, so there is some grouping of otters. This is also the time of mating, and, at the end of May, young may be emerging from last season's mating. Then, beginning in mid-August and through September, there were 26 sightings of two to six otters, particularly in the southern section of my study site. The remaining 96 sightings were of one otter.

SIGN RESULTS. Signs of river otters were found throughout all seasons of the year. Signs were documented, measured and photographed; they included

scat, tracks, slides, haul outs (rolling areas), trails and dens. Empirical results for this section can be found in the complete report.

The results of my survey showed that river otters are continuing to use their reintroduction site and have dispersed into neighboring drainages. Young were sighted during each year of the study in the southern section of my research area. I conclude that this reintroduction continues to show successful results.

DIET RESULTS. This information comes from the publication Berg, 1998a, in which there are also details of the analysis. There were 98 scats collected and analyzed for the years 1993 through 1996. Forty-five percent of the scats were collected from the river system and 55% were collected from a separate drainage in the Arapaho National Forest. Basically, when there was evidence of more than one category of prey in an individual scat, each category was weighted as a percentage of the scat. The data were rounded off to the nearest percentile. Thirty-six percent of the prey items found in otter scat were from Catostomidae (sucker); 34% were from Crustaceans (crayfish); 23% were from Salmonidae (salmon & trout); and 7% were from the other two fish families and insects. There were no other vertebrates or invertebrates found in the analyzed scat. Interestingly, an increase in crayfish, particularly in the southern portion of the study area, occurred during 1995 and 1996, when compared to 1993 and 1994 (Berg, 1998b).

Seasonal trends of prey in the otter's diet were: spring - Catostomidae 11%, Salmonidae 13%, Other 3%; summer - Catostomidae 11%, Salmonidae 4%, Crayfish 26%, Other 2%; and autumn - Catostomidae 14%, Salmonidae 6%, Crayfish 8%, and Other 2% (Berg, 1998a). Winter was under-represented, so is not included in the results.

The findings from my otter diet analysis are consistent with other food

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Otter Updates

by Tracy Johnston and Jan Reed-Smith

- ROA President Judy Berg will give a two-day adult seminar on the natural history of river otters in the upper Colorado River Basin at the Kawuneeche Visitor's Center of Rocky Mountain National Park June 26 - 27, 1999. The Visitor's Center is located at the west entrance of the park in Grand Lake, Colorado. For more information or to enroll, contact Nancy Wilson, Rocky Mountain Nature Association, Rocky Mountain National Park, Estes Park, CO 80517. Phone 800-816-7662.

- A Sea Otter Conservation Workshop is scheduled at the Seattle Aquarium on February 18-20, 1999. For information on the seminar, contact Shawn Larson, Animal Health & Research Coordinator, Seattle Aquarium, Seattle, WA 98101. Phone 206-386-4360, e-mail: shawn.larson@ci.seattle.wa.us. Note: a river otter workshop or combined river otter/sea otter workshop is being planned for the year 2000 at the UC Davis Campus.

- The OTTERNET web site has recently added a bulletin board to be used as a forum for ideas and discussion about otters. It is linked from the home page, or can be found at: <http://www.otternet.com/wwwboard/wwwboard.html>.

- The Care and Rehabilitation of Wildlife facility (C.R.O.W.) located on Sanibel Island, Florida rehabilitates approximately six otters every year. (See Fall 1997 edition of *The River Otter Journal* for more information on C.R.O.W.) C.R.O.W. is an excellent resource for licensed rehabilitators seeking advice. Contact the clinic at: CROWCLINIC@aol.com.

- The International Otter Survival Fund (IOSF) has otter-watching vacations and volunteer opportunities scheduled in Scotland and other parts of the world during 1999. For information on these programs, contact IOSF, Broadford, Isle of Skye, Scotland. Telephone/Fax: 01471-822487, e-mail: iosf@otter.org.

On the Trail of the River Otter

by Paul J. Polechla, Jr.

It was a bone-numbing February day in central Arkansas when I was slipping across the frozen backwaters of the Arkansas River at the mouth of Cypress Creek about two and a half crow-flight miles from Opello, Arkansas. This beautiful part of Arkansas is where a little stream starts in the Oak-Hickory forest of the Ouachita Mountains and then winds its way through the Bottomland Hardwood Forest, and finally through the Bald Cypress trees before it flows into the Arkansas and then the Mississippi River. I had chosen this neck of the woods as my study site for determining the relationship between the river otter and the beaver. The downside was that I had not had much luck at finding a track-laden area for setting my live-traps—with all the hard ground. We were in the middle of a deep freeze of the Winter of 1983-84, when an extended cold snap had left the wide Arkansas River a long and skinny skating rink. It was so cold that locals were comparing it to turn-of-the-century freezes, and my dad (who had come for the thrill of wildlife biology) and I had spent long nights under a rented cabin fixing the pipes after full days of field work.

The upside was that a fresh snow had blanketed the ground creating a beautiful tracking surface. I went to an area just above the Cypress Creek mouth where a narrow sliver of a sand bar separates it from the Arkansas River. A lanky, local, legendary trapper named "Straight Johnson" had suggested that I might find sign of the elusive river otter. The morning was rather gloomy and forbidding until I spotted a set of five-toed tracks in the snow, complete with claws. The toes were spaced in the characteristic 1-3-1 pattern of a typical mustelid, but showed between the toe webbing. Eureka! I had found the track of river otter! My luck was starting to turn for the better as one track led to another and another until finally I was eagerly trailing the fresh path of a river otter.

Pretty soon I found the trail leading upriver on the sand bar until I saw a smaller set of mustelid prints with roundish toe pads and no webbing. Judging by the older age of these tracks and the even spacing of the otter tracks, the mink had walked from the edge of the sand bar to the high bank. Later, a river otter had ambled by, paying no apparent attention to the mink. Continuing on I found a destination for the otter tracks, a beaver bank den on the far side of the slough. Just as the sun began to shine brightly, I noticed the tracks were leading right up to it! Above, from the now azure blue sky, I heard the scream of a bald eagle circling above the river! Ever since that encounter with the otter and its river buddies, the mink, beaver, and bald eagle, my luck on a life-long study of the otter had changed for the better.

Just like the Quapaw Indians had done before, I was practicing the art of tracking in the area. Unlike my Native American and pioneer hunting/trapping predecessors, my purpose was novel. I was trying to find whether or not the otter benefitted from the beavers' dens, lodges, dams, and ponds. In short, what was the status of the river otter and beaver in Arkansas?

You may ask, "Why didn't you just use the 'newfangled' methods of radio-telemetry, satellite telemetry, and infra-red camera systems that you hear about on television nature shows?" My answer is that they don't "tell" me everything that I'd like to discover about an animal, such as where exactly it goes and what it does.

This fascinating "down-in-the-dirt" art/science is used not only by wildlife biologists, but it is also used by forensic scientists to help solve crimes. In this day and age of instant gratification, more thoughtful and challenging endeavors like tracking and trailing are a lost art.

Trinidad Bay Update

by Scott Shannon

Editor's Note: Research scientist J. Scott Shannon has been studying the otter population in Trinidad Bay, located in northern California, for the last fifteen years. The following is his latest informal update on the Trinidad Bay otters.

This was a year of remarkable changes. For one thing, there's now been a complete generational change. All the otters that were here in the 1980s are gone now. The two eldest males from last year, "Beady Eyes" and "Unk" (who were probably thirteen- and twelve-years-old respectively), were seen for the last time in December 1996. Mama Junior's seven-year-old son, "Ninety," is currently the eldest male in the population, and Junior's six-year-old son, "Giant," is the only other adult male here now. There have never been so few adult males at Trinidad Bay. (There were usually seven to eight here in the 1980s.) Also, the two sisters—"Scoots" and "Missster"—both attained adulthood and had their first mating season in April. Along with their mother—Junior's six-year-old daughter "Little Mama"—there are now 3 adult females at Trinidad Bay. This is the first time in 14 years that there are more females than males in this population.

Mama had just one baby this year—a male—the fortieth pup I've seen come into this world. Sadly, he was born with many birth defects, most notably a deformed skull, hind legs that didn't work properly, and a skin-sloughing syndrome that was causing him to lose flesh off three of his feet. I named him "Lop," because of his little lop-sided head. Unfortunately, I got to see Lop only three times. In June, just a week after Mama brought him from the birth den to the harbor, she and Lop suddenly vanished. Never before had I known a dominant, territory-holding mother to leave her home, but as the days passed, it was learned that Mom and her pup were gone. I could think of only one explanation—that Mama had died, and so must have her newborn son. A week after their disappearance, however, my friend and

first mate Sara Moore saw Mama and Lop at the harbor during noontime. I was relieved to know that Mom and the baby were still alive, but it was still a complete mystery to me why Mama was not actually living at the harbor anymore with the rest of her family.

While Mama was away, Scoots took over the leadership of the family group. It's become clear that Scoots is Mama's "second in command," just like Junior was Old Mama's loyal lieutenant. Also, during Mama's maternal exile, perhaps the most extraordinary event of the year took place. You might recall that, during the late 1980s and early 1990s, the adults of this population led strictly sexually-segregated lives. At one point, I went almost six years without seeing an adult male and an adult female do anything as simple as forage together. This past summer, however, when Mama was away, the Two Brothers and the Two Sisters (along with the yearling male "Complainer") formed a stable co-habiting social group. Where before I went years without seeing males and females do anything together but mate, this year I saw them live and interact together virtually every day! The adult males—in particular, Ninety—sometimes got testy with their young adult nieces, but generally this di-sexual group behaved just like all-male Clan of years past. I truly never expected that I would ever see adult females living with adult males, because when Little Mama became an adult, the males aggressively excluded her from their society. Why her adult daughters were not likewise shunned by their elder uncles still remains a mystery to me, though.

After two and one-half months of exile, Mama finally returned to live at the harbor in late August, but Lop was gone. He probably died as a result of his birth defects. I think the reason Mom took him away was that she sensed he wasn't altogether well, and she wanted to take special care of him apart from the rest of her family. Lop was the first of Little Mama's five offspring to die as a pup.

After Mama's return, she and her family lived together with the males for a couple of weeks, but by the end of the third week the family and the adult males seg-

regated into their former separate social groups again. So, I finally learned that adult males will tolerate some adult females to live with them under some conditions. Exactly what those conditions are, though, are apparently entirely up to the individual otters involved. I've finally given up trying to figure out any "universal rules" of otter society. Clearly, the otters of Trinidad Bay make up their own rules as they go along! (And they don't necessarily follow the rules established by their forebears, either.)

Another thing that was unusual about this year was that, for the first time, a yearling male continued to live with the family during his second year of life. Previously, every other young male I've studied has joined the male Clan at the age of fifteen months. "Big Sissy Complainer," however, decided to continue living with his mother and big sisters, even now that he's on the verge of adulthood. Why didn't he join the elder males and live with them like all the young males before him had? I think he simply prefers the company of his sisters and mom to that of his (much older) uncles. Again, another of the "rules" I thought I would never see broken was broken last year.

All in all, because of the many exceptional occurrences I witnessed this past year, I have to say that this was probably the single most valuable year ever in terms of my reaching an understanding of the behavior of these otters. The only firm rule in otter society appears to be that there are no firm rules.



Are the Everglades Forever?

by Paul J. Polechla, Jr.

It was a June day in 1990 deep in southern Florida; the temperature was in the 90's (degrees Fahrenheit) and the relative humidity was about the same. I decided to escape the roving herds of mosquitoes by taking a bike ride through the sawgrass marsh. Yes, you read this correctly. I rode a rented bike on a raised limestone dirt road near Shark Slough in Everglades National Park. I had been peddling along the road for a good bit when I noticed a handsome, golf-ball-sized snail...an apple snail on an island hummock. After admiring the snail's bright shiny coloration, I continued pedaling, marveling at their general abundance. Just as I became mesmerized by the sea of grass, I spied a large bird circling in the sky. As it banked I saw it's characteristics through my binoculars: a slate colored back and belly, a tail with a white basal band and terminal dark band and buffy bands, and orange feet and face. It hovered over the water flapping its wings rapidly with its head down. Suddenly, it plunged into the water feet first, snatched up an object with its talons, and perched on a shrub in a nearby hummock. Upon closer binocular examination, I discovered the raptor had caught an apple snail...undoubtedly the same species I had been seeing along the road. With the raptor's sharply down-turned bill it extracted the innards out of the loosely coiled shell and gulped the contents down. I was a lucky person to see the snail kite (*Rostrhamus sociabilis*)...an endangered species!

All aglow with a feeling of satisfaction, I continued pedaling. No sooner than I had been pedaling for ten minutes, I heard a rustling in the cattails along the roadside ditch. I slowly pulled the bike over for a "look-see:" it was a group of four river otters (*Lontra canadensis*) swimming along with their tails waving back and forth like a water moccasin. Then they dove, showing a steam of bubbles, and surfaced again further ahead of me. They climbed onto

the roadside bank of the ditch and then swam across it and disappeared into the cattails and sawgrass.

As if this were not enough excitement in one day, I saw several nice American alligators (*Alligator mississippiensis*) basking in the glades. This was one of those red-letter days for a wildlife biologist.

On the same trip, I walked along the sands of a Palm Beach resort motel when I stopped to talk with a guy from Bethel, Alaska, trying to make up for a long cold winter by catching some rays. To make a long story short, he asked me if I would care to apply for a wildlife biologist position just opening. I applied, was accepted, and moved to Alaska. About a year later, after I had "experienced" an Arctic winter, I heard a song by country crooner John Anderson called "Seminole Wind." The song goes like this:

"Way down South in the Everglades,

where the black water rolls,

and the sawgrass sways,

the eagles fly and the otter plays,

in the land of the Seminole...

Blow, blow Seminole wind,

Blow like you're never going to blow again..."

The song goes on to lament how, "In the name of flood control, progress took it's toll." The developers and the Army Corps of Engineers had dredged and drained the Everglades so much that the normal southward flow of fresh-water from Lake Okeechobee to the Everglades had been diverted to satisfy the demands of agricultural and municipal demands and to keep the new housing projects dry. It worked too well, and there it was in the 1990s with dropping water tables and salt-water intrusion. "Seminole Wind" reminded me of the plight of the warm Everglades, the Seminole people, and the magnificent wildlife I had seen. Alas, being on a diagonal on the opposite side of the North American continent, Florida seemed merely like a dream, until a double government "down size" later I found myself in the "Lower Forty-Eight" again. Upon returning to civilization I felt information starved. I thumbed through many natural history magazines at my local library. In

one of these magazines, I found an article about the Everglade advocates who had finally convinced the Army Corps of Engineers to revitalize the Everglades by essentially smoothing out the main ditches re-establishing the southward flow of water. Now that a few years and a couple of hurricanes (most recently Hurricane George) have passed, I wonder how the Everglades and its inhabitants have fared. If you are a Florida biologist or amateur naturalist, I would welcome an article updating readers on how things are going in southern Florida. As John Anderson sings, "I'm calling to you like a long lost friend, but I know who you are."

You OTTER Know This!

by Jan Reed-Smith

Did you know:

- Otter pups must be taught how to swim. In captivity the female may begin teaching them when they are as young as 28 days old, when the pups are dropped in the water for very brief periods. Swimming lessons increase in length as time goes on. The pups gradually begin putting their faces under water, begin to control their buoyancy and, finally, begin to dive under water. This process may take a month or more.

- Otter females frequently give birth to their litters at about the same time. For example: a female in Louisiana had a litter February 6, 1981 and February 6, 1983; a female in Michigan had litters April 20, 1993, April 24, 1995 and April 22, 1998, and a New York female had litters April 5, 1989 and April 6, 1992. The reason for this is unknown.

- The genus for the North American river otter has recently been changed from *Lutra* to *Lontra*, or more correctly, the new designation has recently gained greater acceptance. This is due in part to recent DNA work done at UCLA by Klaus Koepfli.

Otter Tale

by Grand Lake School Children

Teacher's Note: Barbara and Judy apologize if we misspelled any author's name. We took 'very brief' editorial license.

Once upon a time a little otter named George was swimming. Another otter came along and started fighting with him. The bigger otter's name was Ryan. They were fighting over a sucker fish when all of a sudden this huge big sucker fish came along and both otters wanted it. Then a big bear named Chela was fishing in the area and decided she wanted the fish and stole it from the otters. The bear had the fish when along came a mountain lion. The mountain lion chased the otters but only the larger otter, Ryan, escaped. Then Grand Lake Day Camp came to the area, and we learned about otters plus made discoveries of their diet by exploring in



Grand Lake Day Camp
Photo by Judy Berg

their scat "poop." We found lots of fish parts such as vertebrae, bones, and scales.

This Tale is by the following authors from the Grand Lake School District: Emily Belard, Shannon Horton, Kendra

Howcroft, Bridget Korkowski, Brad Korkowski, Ryan McBride, Chris Majors, Mandi Mason, Zack Peterson, Ellie Rempel, Hilary Richardson, and Kyll Richardson.

The River Otter Alliance

ENROLL NOW FOR 1999-2000!

As a member you will be supporting research and education to help ensure the survival of *Lutra Canadensis*, the North American River Otter. You will receive a semi-annual newsletter, THE RIVER OTTER JOURNAL, with updates on otter-related:



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Research Summary

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habit studies conducted in our country. Otters take primarily the slower-moving forage fish species, such as Catostomidae, compared to the faster moving game species, such as Salmonidae (References in Berg, 1998a & 1998b). Also, where crayfish occur, they are an important part of the otters' diet, particularly during the summer months in the colder climates. This was also the case in my research results.

Footnote: If information is taken from this article, please use proper referencing. Portions of this data are in the process of being published. Other portions of this data are in the Five-Year Report. Copyright Judith K. Berg.

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The River Otter Alliance

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INSIDE:

*The latest in river otter sightings,
research news, and interesting stories!*

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The River Otter Alliance is a non-profit, tax-exempt group which is organized to promote the survival of the North American River Otter (*Lutra Canadensis*) through education, research, reintroduction, and habitat protection.

All work and efforts for this organization and newsletter are on a volunteer basis by those who share a common concern for the welfare of the river otter and its habitat. We invite all interested persons to contribute their time at any level of the organization.



