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The Cape Clawless Otter (Aonyx capensis) In Kenya

By Jan Reed-Smith



Photo courtesy of Ross Park Zoo

The Laikipia District of Kenya, covering some 9,666 km², is comprised mostly of semi-arid range-lands which are divided primarily into a series of privately, publicly, and communally owned properties used for livestock grazing with some subsistence farming thrown in here and there. The Laikipia plateau is one of Kenya's critical conservation areas. An area where balancing the needs of wildlife and humans is urgent and often complicated by the wildlife's need for space and unpolluted habitats, and the people's need for firewood, food, and a working social infrastructure.

This is a story of a small, but growing army of Kenyans working with international conservationists to preserve and understand their wildlife, and their work on a little known species. Their goal is preservation of Kenya's unique wealth of human, animal, and plant diversity through understanding the needs of all involved.

Primary Study Sites

The Mpala Wildlife Foundation, located in the Laikipia District west of Mt. Kenya, covers 2,032 hectares with an additional 17,842 hectares protected by the Mpala Ranch. In 1994 the Mpala Research Center was established as a non-profit scientific, and training, facility to address environmental issues affecting components of the landscape and to seek ways of resolving their conflicts. The Center is administered by the Mpala Research Trust in collaboration with the Kenya Wildlife Service, the National Museums of Kenya, Princeton University, and the Smithsonian

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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 Fall 2004!

River Otter Alliance Mission

The River Otter Alliance promotes the survival of the North American River Otter (Lontra 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 parties on a national and international basis, in order to ensure the healthy future of the North American River Otter.

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Institution. There are three rivers that run through, or along the edge of Mpala: the Ewaso Ng'iro (originating in the Aberdares mountains and Mpala's main river), Ewaso Narok (originating in the Ewaso Narok swamp in Northwestern Laikipia), and Nanyuki (originating on Mount Kenya).

The Burgaret River flows through the Mount Kenya National Park and crosses under Kenya's main north-south road. The northern mid-section of this river system has been included in the Mpala study to incorporate a forested riverine ecosystem (a low-temperature ecosystem that has not been invaded by crayfish, which cannot survive below 14 degrees centigrade).

The Otters – The Little Known Species

There are at least two species of otter found in sub-Saharan Africa, the Cape (African) clawless otter (Aonyx capensis) and the spottednecked otter (Lutra maculicollis). Very little is known about these species outside of southern Africa where most of the work has been conducted in Zimbabwe or South Africa. As a result both the IUCN/SSC Otter Specialist Group (OSG) and the AZA Otter SSP have been promoting the need for further

in-situ research on these species. (Dr. Jan Nel, Dr. Hélène Jacques, and Claus Reuther of the OSG have been actively surveying for otter in several African nations for the past two years as well as investigating the status of the Congo clawless otter as a subspecies of Aonyx capensis or a true species Aonyx congicus.)

The Cape clawless otter, the third largest otter species (only the giant and sea otters are bigger) can reach a length of 1.5 meters and weigh 11 to 18kg (Somers 2000); in general, the males are heavier than the females and slightly longer (Estes 1991). The heaviest animal on record was 34kg (Eyre 1963). The forefeet are specialized for probing and manipulation, thus the typical inter-digit webbing is absent, the toes are clawless, the soles are naked, and the 'thumb' is opposable. The hind feet are webbed. The exceptionally long whiskers and highly developed sense of touch aid in the location of prey in murky waters, under rocks, and in crevices.

This semi-aquatic species is found occupying rivers, marshes, dam areas, and lakes, dry stream beds with permanent water pools, and intertidal zones where there is access to fresh water (Stuart 1993). The Cape clawless otter will frequent murkier/dirtier water than the

spotted-necked otter, which is more dependent on fish as a primary food source (Perrin & Carugati 2000). The Cape clawless otter also appears to travel overland more frequently than its smaller cousin the spotted-necked otter and has been shown to spend up to 80% of its time on land (Verwoerd 1987, Perrin & Carugati 2000).

While this species is known to be primarily active during the early morning hours and late afternoon/early evening hours (Somers & Purves 1996, Rowe-Rowe 1978), individuals have been seen foraging during the day (Mpala Ranch) in areas of little overt human disturbance. They also are known to be completely nocturnal in areas with heavy human influence (e.g. fish farms and agricultural areas in Kenya).

In freshwater ecosystems, the Cape clawless otters' natural diet is comprised primarily of crab but they will feed on introduced crayfish, fish, frogs, molluscs, small mammals, birds, insects, insect larvae, and some vegetation. Small amounts of ruminant dung have been found in analyzed scat (Butler & du Toit 1994, Perrin & Carugati 2000); why they periodically consume this is not understood. The Cape clawless otters capture prey with their forefeet which are covered with rough skin improving their ability to hang on to slippery food items like fish and frogs. In general, prey items are consumed while still in the water; the animal will surface and eat while lying on their backs, treading water, or with their heads just below the surface (Rowe-Rowe 1977a & b, Estes 1991). Their preferred hunting depth is 0.5 to 1.5m (Somers 2000).

Home ranges of animals living in coastal areas of South Africa varied from approximately 9 to 19km (Rowe-Rowe 1992) or 19.5km (Arden-Clarke 1986). Arden-Clarke (1986) documented that within these home ranges there are core areas of activity where the animals spend the majority of their time.

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Otter Updates

By Tracy Johnston

- The state of Illinois removed the river otter from the state's list of endangered and threatened species at the February 20, 2004 meeting of the Endangered Species Protection Board. A January, 2004 news release announced the proposed action, with the following information: "Lontra canadensis (river otter). Proposed action: remove from threatened. Specific criteria for the de-listing of this mammal are outlined in the official IDNR Recovery Plan for this species (widespread distribution, natural reproduction, and stable or increasing numbers). Multiple, independent sources of data demonstrate that these criteria have been exceeded. The population in Illinois is expected to grow from 1,800 animals in 2001 to 4,600 in 2005 in areas of Illinois where they were released (Wabash, Kaskaskia, and Illinois river basins)."
- U.S. Representative Sam Farr, California, has proposed Southern Sea Otter Recovery and Research Act (H.R. 3545) in order "to establish a program of research and other activities to provide for the recovery of the southern sea otter." If approved, the bill which would provide \$5 million in funding for each of the fiscal years 2004 through 2009, of which \$2 million each fiscal year would be for competitive grants awarded by The Secretary of the Interior to support research regarding southern sea otters. The bill was referred to the Subcommittee on Fisheries Conservation, Wildlife and Oceans and also to the Secretary of the

- Interior for Executive Comment on 12/2/03. These remain the last major actions taken on the bill as of the publication date of this newsletter. Southern sea otters are currently listed as a threatened species under the Endangered Species Act of 1973, and are recognized as depleted under the Marine Mammal Protection Act of 1972. A 2003 census counted 2,505 otters in the current range for California sea otters, located between Santa Barbara and Half Moon Bay.
- A health warning was issued this April against eating California shellfish after state scientists found domoic acid in mussels collected off the Santa Cruz County coast. Domoic acid, a naturally occurring marine toxin sometimes found in algae blooms, can cause nervous system damage to humans, birds and marine mammals who eat small fish or shellfish contaminated with the toxin. An April 15, 2004 article in The San Francisco Chronicle reported domoic acid was the likely cause of illness or death for over twenty sea otters found within that week around California's Morro Bay. Wildlife experts believe the otters may have eaten mussels, clams or scallops contaminated with the toxin, and as a result suffered seizures or death; necropsy results were still pending at the time the article was written. Domoic acid has been discovered in seawater around Santa Barbara, Los Angeles and San Diego, as well as in Monterey Bay in years past.
- The IXth International Otter Colloquium will be held at Frostburg State University in Frostburg, Maryland June 4-10, 2004. Scheduled topics include: Veterinary Care/Physiology, Continental Reports, Status and Distribution, Reintroductions, Threats, Genetics, and Histories and Missions of Worldwide Conservation Organizations. http://acsun.frostburg.edu/events/otter/ for information on the conference. Questions may be directed otter@frostburg.edu.



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As with most of the other species, scent plays an important role in Cape clawless otter. Van Niekerk et al. (1998) theorized that spraints may be used for communication as they were frequently found near often-used sites and obvious landmarks. Arden-Clarke (1986) states that: "...the spraints of A. capensis appear to have social significance. Ritualized movements are performed during sprainting and there is a significant clumping of spraints at holts." While he did not rule out their [spraints'] function in establishing territories, he does note that their tendency to spraint in areas of high activity could indicate the otters are using these deposits as some sort of social communication signal. Rowe-Rowe (1992) also found that the most frequently used sprainting sites were near holts.

Perrin and Carugati (2000) determined the otters in their study site showed a preference for natural riverine habitat as sprainting sites, generally selecting river banks covered by tall grass, bushes, shrubs, or reeds, and rocks covered by dense vegetation.

The location of otter holts are generally dictated by the availability of food, fresh water, and suitable cover (Verwoerd 1987). Typically they are located above the river banks, lake or dam shores, on earth ledges in the bank, or between rocks with dense vegetation cover (Perrin & Carugati 2000, Rowe-Rowe 1992), or, in areas that include both bank ledges and above bank areas (Rowe-Rowe 1992). The Cape clawless otter appears to utilize a system of primary and secondary holts (main and subsidiary as described by Kruuk & Hewson 1978). The primary holts are used repeatedly and may make up a portion of the otter's core activity area. Secondary holts are used less frequently, may be used for lying up during the day, and in at least some cases, could be considered 'couches' if described as scraped depressions in the grass located within vegetation tunnels. The Cape clawless otter will excavate its own holt where soil is suitable and is known to transport grass or other vegetation to provide bedding within the holt (Rowe-Rowe 1992).

Evidence suggests that in at least coastal ecosystems the Cape clawless otter is somewhat social. In addition to the female/cub and male/female breeding units, a 'clan' system was reported by Arden-Clarke (1986) and family units (female, male, and young; these associations may be loose ones with the male joining only during the day or for some foraging expeditions) were observed by Verwoerd (1986), Rowe-Rowe (1992) and others. The South African studies indicate that home ranges overlap, in some cases extensively, but that animals may not use the same areas simultaneously (Rowe-Rowe 1992, Arden-Clarke 1986), while at other times multiple animals are foraging in the same vicinity.

Births in South Africa are believed to generally occur December to February based on the first appearance of cubs from five litters in April and June (this presumes a two month gestation and $1^{1/2}$ to two month denning-up period) (Verwoerd 1987). However, little is actually known about the reproduction of this species. Gestations of 80 and 103 days have been reported in captivity (unpublished AZA data).

Conservation Status

In Africa, otters are rarely seen by the general public. As a consequence they are seldom taken into account when conservation activities are planned. At this time the Cape clawless otter is listed on CITES Appendix II. (Appendix II contains (a) all species which, although not necessarily currently threatened with extinction, may become so unless trade is subject to strict regulation; and (b) other species that should be subject to regulation to control the trade of the animals, or their parts, because they are similar in appearance to a more threatened species.) currently lists the African clawless otter as Lower Risk, least concern due to its distribution at this (http://www.redlist.org/search/details.php?sp ecies=1793).

"The greatest threat to African otters has been

identified as the rapidly increasing human population (Rowe-Rowe 1990). This leads to adverse alteration of freshwater habitats and riparian vegetation; or loss of habitat following increased agricultural activity, commercial afforestation, unsound agricultural practices, or overgrazing by livestock in rural areas. In the vicinity of urban areas, expansion and industrialisation have been responsible for both loss of habitat and pollution of streams and rivers, as too has acid pollution from coal mining (Rowe-Rowe 1992a). (1997) notes that soil erosion/turbid water have a negative influence on occurrence, and that it is a poor colonist (or re-colonist) as permanent, continuous (and clear) water is a prerequisite." (Nel, et al unpublished draft.)



Kenyan Study and the People

Mordecai (Mordy) Ogada, a PhD candidate at Kenyatta University in Nairobi, is studying the effects of the Louisiana crayfish (Procambarus clarkii) invasion and other human impacts on the African clawless otter in the Ewaso Ng'iro ecosystem at the Mpala Research Center.

"Large mouth bass were introduced into Kenya (Lake Naivasha) in the 1930s for sport fishing. Shortly thereafter, the bass were found to be depleting other fish species in the lake by predation. Therefore, the Louisiana red swamp crayfish was introduced to provide food for the bass (Dorothy Nyingi, pers. comm.). It was later discovered to be an aquacultural "cash crop" and was spread through various freshwater ecosystems as people sought to profit from it. Kenya now exports over 6,000 kg of crayfish annually (Bryan Shorrocks, pers. comm.). It was also found to be a potential biological control agent for natural populations of schistosome transmitting snails (Mkoji et al., 1992), and this further accelerated the spread." (Ogada 2003)

He further states: "In recent years, the Ewaso Ng'iro ecosystem has come under increased pressure from various human activities. Foremost among these is increased water extraction from new and expanding horticultural and flower farms. These are concentrated in the upper reaches of the Ewaso Ng'iro basin, around Nanyuki and Timau. These farms are also sources of pollution from their intensive use of pesticides and fertilizers. Nanyuki town is another major source of pollution, mainly from the large quantity of raw sewage discharged into the Nanyuki river (a tributary of the Ewaso Ng'iro) by the local authority. During the dry season when the water levels are very low, the concentration of pollutants in the water rises sharply." (Ogada 2003)

As with all biological introduction projects there were unintended consequences. The recent invasion of crayfish into the Ewaso Ng'iro ecosystem led to the reduction of the native freshwater crab, Ptamonautes neumanni, population which is now confined in Laikipia to waters too cold for crayfish. This, combined with increasing human impact on the landscape led to the question – What effect is this having on the otter population, one of the top predators in the region's aquatic ecosystems?

To answer this Mordy began studying Cape clawless otter in 2003. His project focuses on the status and conservation biology of two



major species of East African freshwater habitats, the indigenous crab, and the Cape clawless otter and how they have been affected by the introduction of the crayfish. The ultimate goal of the study is to develop recommendations on how best people can exploit river ecosystems with minimum effect on aquatic fauna. Currently, water extraction is not regulated, pollution is unchecked, and sport fishermen continue to introduce or 'stock' aquatic ecosystems with exotic species without any due consideration to the ecological impacts of these activities. (Ogada 2003)

While the otters have adapted easily to the crayfish as a food source, Mordy has found the crayfish experience a boom and bust population cycle corresponding with the water level of the river. This abundance, then scarcity, is contrary to the more stable availability of the crab species typically preyed upon by the otters. As the water level falls the crayfish become more vulnerable to other predators (heron, water mongoose, baboon are a few); this seasonal drop forces the otters to feed more often on fish which is harder to catch. The otters appear to be responding to this prey shift by ranging over longer distances and ceasing, at least seasonally, marking of their territorial boundaries. It should be noted that the fact they are marking territorial boundaries is different from what has been seen in South Africa; it is not known to what extent this is influenced by the impact of humans on their ecosystem, or differences in habitat.

Mpala Results

Within the Ewaso Ng'iro and Ewaso Narok ecosystems the Cape clawless otter shows a preference for slow moving sections of the river marked by the presence of pools with muddy bottoms favored by the crayfish.

Typically, otter scats are found on prominent landmarks during the 'high water' periods. These include the Mpala dam, large rocks jutting from the river bank, and root systems of trees extending into the river, or located at the confluence of the Ewaso Ng'iro and Nanyuki rivers. Other latrine sites frequented by the otters during this time are small, densely vegetated islands within the river and large trees located on top of the bank. During the 'low water' times otter sign is harder to find with scat more typically deposited in tall grass, or perhaps, further from the shoreline were it has gone undetected.

Activity at Mpala seems to be most often nocturnal or crepuscular with only rare sightings of the otters during the day (we accidentally disturbed one otter from its resting place at about 10 a.m. one morning). Holts are believed to have underwater entrances because the otters have been seen to dive and not resurface; no bankside holts have been located to date. Secondary holts, or day couches, are generally located on the small, dense grass islands mid-river, or within thick brush vegetation along the river banks, sometimes at the base of a tree.

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One group of five animals, two adults and three smaller individuals, was observed traveling together on the Ewaso Ng'iro; all other observed animals have been alone when seen. 'High water' territorial markings have led Mordy to conclude there are at least three family groups (or individuals) within his study area; one group using the Ewaso Narok and two are residing on the Ewaso Ng'iro. At this time it is too early to conclude the extent of each group's home range size but if the interpretation of territorial markings is correct the active scent sites are roughly 4km apart.

Burguret Results

During my visit in January/February 2004, Mordy, his wife Darcy, and I did an initial survey of the Burgaret River located south of the Mpala Ranch site and just outside of the town of Nanyuki. The Burgaret flows down from Mt. Kenya through 'protected forest' down onto the Laikipia plateau where it crosses under the Nairobi – Nanyuki road and continues on through the range land. The section of river surveyed included areas near the Mountain Rock Lodge, small livestock shambas, a trout farm, and forest. Portions of the surrounding forest have been impacted by illegal clear cutting and we found evidence of snare and pit-trap poaching. In short, the area represents an ecosystem in transition, one that is partially protected but vulnerable to further degradation.

Despite the obvious threats we observed, particularly from the clear cutting, the otter population appears to be abundant and fairly healthy. While there we located at least two primary holts, several secondary holts, and numerous sprainting sites. The most exciting experience was the otter Darcy observed pasting otter jelly on the trunk of a tree, spraying the near-by bushes with urine and the jump-

ing back in the river to dine on a few crab.

Since my return to the U.S., the Ogada's have returned to the Burguret and quickly relocated the otters and another possible holt. Work will continue in this area which promises some interesting comparisons to what is being observed at Mpala.

Sagana River

The Sagana is another river originating on Mt. Kenya flowing down through the Mt. Kenya National Park and onto the Laikipia plateau and into communal farm land. While surveys have not been conducted as yet, otters are reported to be seen throughout this ecosystem. Investigation of this river would provide valuable information on the status of otter in a relatively undisturbed forest habitat (up river), and the impact of heavy agriculture further down river. Interestingly, both Mordy and I have been told by different

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sources that otter are being blamed with crop depredation, particularly showing a fondness for young maize and cabbage. Is this really being done by the otters, if so why?

My visit to this area brought the whole otter experience in Africa home to me. I spent time with Vincent Kiama (Resident Naturalist, Serena Mt. Lodge) and Charles Kamau Muchiri (Kenyan Police) talking about otters and looking for sign at a pump station they are known to visit on occasion. Both gentlemen are dedicated to the conservation of Kenya's wildlife, both work daily to protect that wildlife and educate the local community and tourists. Both knew of otters, a good sign, both were intrigued to find someone interested in such an unknown animal. What I realized is that these are the people we need to reach out to as otter conservationists. They are there as valuable educators and information resources: if we do not understand how a species is viewed by the surrounding population, we have no hope of preserving them. With the help of people like Vincent, Charles, Mordy, Sadat, and Hussein (Mordy's field assistants) we have begun to better understand the status of otters in Kenya. It is with them and conservationists like them that the future of the otters in Kenya lies.

Letter to the Editor

Dear Editor:

I am responding to the letter to the editor in the Fall, 2003 edition of this journal by Merav Ben-David. Specifically, I would like to address her concerns, as well as others, regarding the perception of reduced protection for river otters by the recent change in Colorado status from state endangered to state threatened. I think many people are confused by the differences between protection under state statutes and those offered to federally listed species under the Endangered Species Act (ESA). There is no equivalent of the ESA for the State of Colorado. However, the State does have statutes that offer protection for species listed as State Threatened or Endangered. The bottom line is that the protection offered to a species by the State of Colorado is the same whether it is state threatened or state endangered.

This protection is stated in state statutes as follows:

"...it is unlawful for any person to take, possess, transport, export, process, sell, or offer for sale, or ship and for any common or contract carrier to knowingly transport or receive for shipment any species or subspecies of wildlife appearing on the list of wildlife indigenous to this state determined to be threatened within the state"

This above paragraph is repeated for endangered status, with the only change being the replacement of the word 'threatened' with 'endangered'.

There is no protection of habitat under the state statute for either status; the only protection offered is that listed above (protection against take). In contrast, the ESA is a very broad and powerful law that offers much more protection for federally listed species and includes protection of critical habitats. River otters have no federal protection under the ESA.

In September 2003, the Colorado Wildlife Commission changed the status of river otters from endangered to threatened based upon results of surveys conducted in 2002 and 2003. A total of 1,235 river kilometers were surveyed and 252 points of otter sign were collected on 5 rivers where otters were released and 6 rivers without release sites. On rivers with no release sites, otter densities ranged from no otter sign to 10.5 km/ otter sign, the highest density being 5.5 km/ otter sign. Otter sign densities for rivers with release sites ranged from 6.5 km/ otter sign to 1.9 km/ otter sign. A River Otter Recovery Plan was finalized in July, 2003 and included criteria for both downlisting and delisting river otter in the state. Criteria for down-listing river otter required otter sign to be present in each 5 km section for a minimum of 50 continuous kilometers in 3 separate rivers. Sections of 4 of the rivers surveyed had otter sign that met or exceeded the criteria. The persistence and distribution of otter sign provides evidence that river otters have dispersed from original release areas and have established populations in Colorado.

The definition of State Endangered species is "any species or subspecies of native wildlife whose prospects for survival or recruitment within this state are in jeopardy"

The definition of State Threatened species is "any species or subspecies of wildlife which, as determined by the commission, is not in immediate jeopardy of extinction but is vulnerable because it exists in such small numbers or is so extremely restricted throughout all or a significant portion of its range that it may become endangered."

I hope this information helps to clarify some misperceptions with regards to Colorado protection of threatened or endangered species.

Pamela Schnurr Forest and Shrublands Species Coordinator Species Conservation Section Colorado Division of Wildlife

Surveying for Otters on Colorado's Dolores River

By Janene Colby

stood on the bank of the Dolores River excited by the sight of an extensive active otter latrine. Coming upon animal scat would be appalling to most people, but to a wildlife biologist, it is like finding a twenty-dollar bill on a sidewalk. Otter feces were scattered from the entrance of the beaver den built into the side of the bank, down to the water line. I had been following an otter all morning watching it slowly work a zigzag pattern upstream searching for crayfish. Occasionally it would exit the water, thoroughly check out a latrine, scratch and pile up grass, defecate and return to the water. I would mark the location of each latrine with my GPS. I planned to return later to collect the fresh otter scat for possible DNA analysis and write down a detailed description of the topography, type of substrate, vegetation, river characteristics, and number of feces. I had watched this otter defecate outside the entrance to the beaver den, and then enter the den. A few minutes later it exited the same opening and proceeded to swim downstream at a good pace not stopping to forage. I made a decision not to follow the otter back downstream, but instead check out the den and collect the scat. As I bent over to scoop up a fresh pile of scat, I thought I heard a low growl. I turned and looked in the direction of the entrance to the den just two feet away. Nothing appeared, and thinking I had imagined the noise, I resumed my preparation to collect the scat. This time there was an unmistakable growl (although an otter growl sounds nothing like the typical dog growl). When I turned toward the den a second time an adult otter, head poking from the entrance, glared at me. I have had some experience with angry otters in captivity, I decided not to collect the scat and backed away hastily! I had assumed that the otter I saw exiting the den earlier was the same otter that entered. Evidently there was more than one otter residing in that den.

The following month, I returned to observe the den in the hope of possibly seeing some otter pups. In the gray dawn light, with mist rising from the water, I settled in some thick brush on the opposite bank to the den. Within fifteen minutes, I spied an otter foraging for crayfish just downstream of the den site. As I was watching, a beaver swam past the otter with a large branch in its mouth. Both ignored each other. The beaver continued upstream and to my surprise it went into a water entrance right next to the one I had observed the otters using. I then heard some faint strange noises emanating from the den for a few minutes and then all was quiet. It is known that otters will take over abandoned beaver dens, but this beaver apparently was sharing this complex with the otters. About an hour later, the otter I had been watching downstream returned to the den. As the otter was sniffing around outside the den, there was an explosion of activity as two young otters appeared out of a hole in the bank, raced past the older otter and disappeared in another hole at waterline. Then an adult otter came out another hole, ran high up along the bank, down the slope and back in the water. A fourth came out the main entrance, ran over the logs piled up on the den and disappeared through another hole. A few minutes later we saw two otters head down stream. I continued to watch the den but all was quiet. Later in the day, I saw what I presumed were the two otters returning from downstream. I could see them with my binoculars running along the shore. They entered the water, came over the top of a beaver dam and both porposed side by side at breakneck speed through the calm deep water above the dam. They then ran up on some rocks, chasing each other and then back into the middle of the river with tails flying and water splashing. The one otter hauled out onto a grassy bank and began to roll for about three minutes. The other otter continued upstream, past the den without a glance towards it. When the first otter finished rolling, it came upstream and entered the den for about two minutes, came back out and went about 100 feet upstream to a latrine site, where it rolled, scratched, defecated, and



Photo by J. Stahl and C. Reynolds

sniffed for about five minutes, entered the water and continued upstream.

I recorded this and many other otter sightings in March and April of this year. However it all started three years ago when I took a winter camping trip to the Dolores River below McPhee Reservoir and had the privilege of spotting four river otters. I followed them up and down the river for two days, watching them catch crayfish. While my otter "addiction" began long before this trip, it was the first time I had observed otters in the wild, and I was thrilled. I have returned several times each year since, hiking 12.5 miles of the river from McPhee Reservoir to Bradfield Bridge, recording signs of otter activity.

While I have not yet quantified my data on this stretch of the Dolores River, there are certain features that seem to be preferred sites for latrines and haul outs for rolling and scraping up vegetation. It appears that otters on the Dolores River benefit from the habitat provided by the presence of beavers. The water flow on the Dolores River below McPhee dam has been extremely low and beaver dams help maintain areas with deep, cool pools of water which is helpful to maintain the otters prey base of fish and crayfish throughout the hot summer months. The most predictable activity sites are where a beaver dam connects to the bank, or just slightly upstream of the dam. Beavers' dens built into the side of banks are also locations to find otter latrines, especially right outside holes along the shore above the bank. Another popular activity site is flat grassy stretches along the shore, preferably with a slope behind the flat area with thick trees and deadfall within 5 feet behind the grassy area. However, if the grassy area is on the same side as the road, which runs along the river, and there is an open field between the road and the river, there will not be an otter latrine. I have only found den sites and large active latrine sites on river left. I believe this may have something to do with the fact that the road is on river right, and most people walk and fish along this side of the river. I have yet to find a latrine in areas where the shoreline consists of cobble. However, if there is a large flat boulder that protrudes out into the water, feces may be found there, but this is not as predictable as grassy areas or areas just above a beaver dam. When I come across a very sharp bend in the river, I usually find a latrine located exactly where the main flow of the river hits the outside of the bend.

On my last trip, I was at one of these sites collecting otter feces with my back to the river. I turned around, and there in the water just four feet from me was an otter watching me. We stared at each other for a good 10 seconds before the otter decided to continue heading upstream looking for crayfish. I followed this otter for the next four hours as it worked its way upstream. To my excitement, it stopped at several of the latrines that I had recorded the day before and a few that I had missed as well.

My goal is to continue my observations of the otter population on this stretch of the Dolores. There are many competing interests as to how this river should be managed. Presently, sections of the river are being restored in an attempt to decrease summer water temperature and increase pool and riparian habitat. It will be interesting to see how this and other changes will affect the long-term success of the otter population.

President's Message

Dear Readers,

Welcome to the Spring 2004 edition of The River Otter Journal.

In this issue, Jan Reed-Smith has written an article which discusses research on Kenya's Cape Clawless otter, Dr. Melissa Savage provides an update on New Mexico's proposed river otter restoration project, and Colorado Division of Wildlife's Pamela Schnurr has submitted a Letter to the Editor regarding the status of river otters in Colorado. In addition, Janene Colby has provided a summary of her recent experiences observing otters on the Dolores River. Also included are photos of river otters taken in Yellowstone National Park. *Otter Updates* provides information on the proposed Sea Otter Recovery and Research Act and an overview of scheduled topics for the IXth Otter Colloquium beginning June 4, 2004 in Frostburg, Maryland.



Sea Otter Photo by Chris Wittenbrink

I want to extend a special birthday greeting on behalf of <u>The River Otter Alliance</u> to otter expert Frank Webb, who recently celebrated his 100th birthday with over eighty friends and family members. Frank's daughter, Gladys Rogers, reports he "really enjoyed his party" and "is doing quite well considering his age." She also said friends have taken him fishing a few times recently.

I want to thank our readers for helping to keep us informed about current events, research, and other otter-related topics occurring in the United States and around the world. Thank you also for remembering your annual tax-deductible River Otter Alliance dues contributions, which allow us to produce this newsletter and provide educational information and materials to interested persons and groups on all thirteen species of otters.

— Tracy Johnston, ROA President and Newsletter Editor

River Otters in Yellowstone National Park

Photos by J. Stahl and C. Reynolds













Possible Otter Restoration in New Mexico

By Melissa Savage

n mid-January, Bill Dunn of the New Mexico Department of Game and Fish made a presentation to the State Game Commission, informing the Commission that the Department would be looking into the feasibility of river otter restoration in some rivers of the state. Members of the Department have been attending meetings of the informal partnership of organizations and folks interested in possible restoration of the otter. The otter inhabited a number of state streams; the last known otter was killed in the Gila River in 1953. The feasibility study will address a number of issues that must be addressed before restoration plans could be made, including surveys that ensure the adequacy of potential habitat and food base, and that there are currently no otter populations. Non-profit organizations, agencies and individuals in the state have expressed support for the feasibility study, including Amigos Bravos, the Alliance for Rio Grande Heritage,



Photo by Eric Peterson®

Audubon New Mexico, the Taos office of the Bureau of Land Management, Center for Biological Diversity, Defenders of Wildlife, Four Corners Institute, Sierra Club, and the Upper Gila Watershed Alliance. With luck, the study will be complete within 6 months, and its findings will recommend restoration of river otters in New Mexico.



ENROLL NOW FOR 2004!

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

Educational Programs, Environmental Issues, Research Information, River System and Population Surveys, and much more!

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The River Otter Alliance is a non-profit, taxexempt group organized to promote the survival of the North American River Otter (Lontra canadensis) though 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.



6733 South Locust Court Centennial, Colorado 80112

INSIDE:

Cape Clawless Otter in Kenya, New Mexico Otter Restoration, Surveying for Otters on Colorado's Dolores River and other interesting stories!