

THE RIVER OTTER JOURNAL

Volume III, number 1

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A Message From Our President:

The river otter (*Lutra canadensis*) was formerly found throughout the lower 48 states of the U.S., with the exception of the extreme southwest. Now the river otter appears to be missing from almost two-thirds of that original range. Fur trapping caused early impacts to the otter populations and, today, habitat losses, polluted and dewatered streams, and trapping continue to hurt otter populations. In an effort to update status surveys conducted earlier by otter researchers and to obtain a consolidated picture of the river otter situation in North America today, we are in the process of updating our status files for each state and province.

HOW TO HELP RIVER OTTERS

You can help us compile a current status report for each state and province by writing your state wildlife agency and requesting population figures and information on the legal status of river otters. Ask about the levels of protection for otters in your state, the extent of trapping, and the numbers of otters that are incidentally taken during the trapping of beaver. Urge a statewide field and questionnaire survey and offer to help with a volunteer survey. Encourage and support measures that provide funding that will allow your state wildlife agencies to support such projects. If your state does not have a healthy otter population, urge the launching of a reintroduction program, provided that suitable conditions still exist. Our goal is to support efforts that will help stabilize our current otter populations and to return otters, where possible, to their original range. Please join us in actively supporting these efforts.



Photograph by Leonard Rose, III

OTTERS IN SCOTLAND AND THE CONROVERSY OVER THE PROPOSED ISLE OF THE SKYE BRIDGE

EDITOR'S NOTE: A new concern over a proposed bridge which would join the Isle of the Skye with the Scottish mainland and would negatively affect the otters in the area has been brought to our attention. We are providing a brief summary of our correspondences.

To: Carol Peterson, The River Otter Alliance
From: Veronica Stevens, The Scottish Otter Association

Summary: Construction of a bridge has been proposed to join the Isle of Skye with the Scottish mainland. This island and associated smaller islands currently support an otter population; this area is associated with the book 'The Ring of Bright Water' by Gavin Maxwell. The grave site of one of Gavin Maxwell's otter is actually on one of the smaller islands. The proposed construction would negatively affect otter populations and would directly destroy otter habitat. However, an alternative bridge route exists which is actually shorter and would have a greatly reduced impact, if any, on the otter population. The proposed Skye Bridge is being funded by the Bank of America and could you please ask them to strongly consider the alternative route?

To: Carol Peterson, The River Otter Alliance
From: Bank of America

Summary: In response to your inquiries, the Bank of America is aware of the otter population and the potential problems and has conducted an environmental impact assesment to address these problems. The results of the assessment determined that mitigation measures can avoid unacceptable disturbance to the otters. These measures include: 1) the construction of artificial dens would replace those removed by construction, 2) underpasses would be constructed to allow the otters to travel under the new road, 3) the construction of grooming pools in areas of otter activity, and 4) a barrier to prevent otters from having access to the new road.

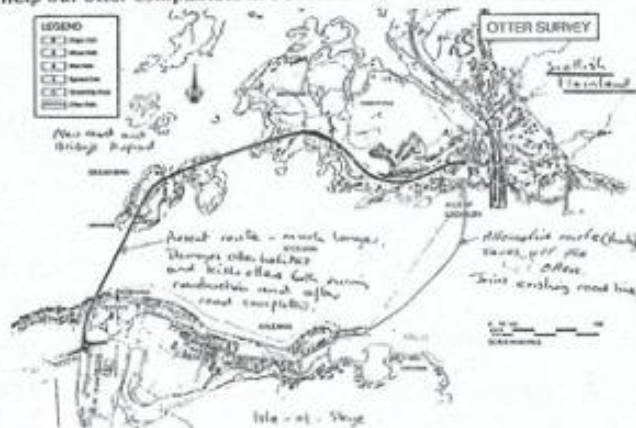
The alternative route is believed to be more damaging in the long term since it is a low embankment and would result in a greater frequency of otters attempting to cross the road.

To: Carol Peterson, The River Otter Alliance
From: Pat Foster-Turley, IUCN/SSC Otter Specialist Group

Summary: Thank your for sending me the information on the Skye Bridge controversy. I have heard about this problem from many sources and I cmpathize with their concerns. On behalf of the Otter Specialist Group, we have sent the enclosed letter of concern. "With all of this input, and your help and that of others, I feel sure that we can help our otter compatriots in Scotland."

To: Carol Peterson, The River Otter Alliance
From: Pat Foster-Turley, IUCN/SSC Otter Specialist Group

Summary: Thank you for sending me the information on the Skye Bridge controversy. I have heard about this problem from many sources and I empathize with their concerns. On behalf of the Otter Specialist Group, we have sent out the enclosed letter of concern. 'With all of this input, and your help, and that of others, I feel sure that we can help our otter compatriots in Scotland.'



To: Memo
From: Claus Reuther, Otter Specialist Group - European Section

Summary: An IUCN member organization has recently examined the ecological impact on otters of the bridge and road development on the Isle of Skye and has reported: Otter numbers are considerably lower than originally thought and the area being destroyed for the bridge is one of the best habits for otters around the Isle of Skye. Given this information, this area takes on a more significant status for the long term conservation of otters in Scotland.

The proposal to construct artificial dens to replace those that were lost will not be effective since 'once the disturbance has occurred and the hole (den) has been removed, the female otter will be driven away and will probably die because all surrounding territories will already be occupied.'

We recommend that the present scheme with the long access route should be halted (in order to reduce damage to habitat and to reduce road deaths) and alternative routes for road developments must be found.

Agonistic Behavior Of A Mew Gull (*Larus canus*) Towards A Nearctic River Otter (*Lontra canadensis*) In Western Alaska

By Paul Polechla, Yan-Ju Aiaginar, and Steven Whiteman

(Due to space limitations, we regret that we are unable to print this article in its entirety. However, we will be pleased to mail a photocopy of the original article (8 pages) upon request.)

While engaged in a raptor nesting study on the upper Kisaralik River, we observed an interesting encounter while at the northern shore of Ice Box Lake in the Yukon Delta National Wildlife Refuge, Alaska.

On 7 July 1992 we stepped out of our tent at 0930 (AST) just in time to see an animal entering the shallow shore of the lake. As it swam directly in front of us (<10 m), I (PJP) noticed the pointed head (not squared-off like that of a beaver) and long, tapering, furred tail that trailed behind the animal in a snake-like fashion. The fusiform shape of the animal created very little wake. The animal was unmistakably a nearctic river otter (*Lontra* = *Lutra canadensis*). I reached for my 35 mm camera and a 20-60 X spotting scope and my colleagues (YJA and SW) were wearing binoculars around their necks.

While swimming on the surface of the water, the otter repeatedly dove beneath the surface. About three to four times the otter "periscoped" out of the water

down in a typical terrestrial otter locomotion pattern. At 0940 AST neither of the otters could be seen any longer.

Although both river otters and mew gulls have been reported previously in the Yukon Delta National Wildlife Refuge, this is the first reported agonistic encounter between the mew gull and the river otter in North America. This is also the first published encounter between gulls (*sensu Laridae*) and otters in which the gulls were the aggressors. Prior to this, river otters have been observed to be the aggressors, actually preying upon the glaucous-winged gulls (*Larus glaucescens*) in British Columbia. River otters have also been observed to prey upon fork-tailed and Leach's storm-petrels (*O. furcata* and *O. leucorhoa*) in Alaska and common gallinules (*Gallinula chloropus*) in Florida. In addition, researchers occasionally find bird remains in otter gastro-intestinal tracts and feces.

Three species of birds have been recorded to kleptoparasitize river otters to date: 1) common crows pulled the tail of and stole the food from an otter in Florida; 2) bald eagles attempted kleptoparasitism on river otters in

and looked in our direction and then swam past us in an easterly direction following the shoreline about 0.4 km from us.

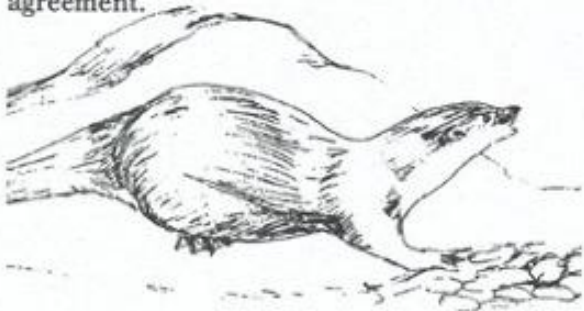
At this point, three mew gulls (*Larus canus*), with white bodies, grey upperwings, yellow mandibles and legs, and white wing tips, flew into the area. On two occasions, one mew gull flew towards the otter, hovered above the otter, called loudly, and then swooped at the otters' head repeatedly from about 7.5 m above the water's surface. The otter responded by diving beneath the water and then resurfacing. This sequence was repeated three more times by the same gull and otters, until the gull abandoned its attack.

We continued to observe the otter with field glasses and the spotting scope as it swam in the direction from where it originally came. As we watched this otter, another otter was discovered in the background traveling in the opposite direction. Then, in watching the first otter, we lost sight of the second otter. The first otter walked out onto the gradually sloping bank, across the cobble stone, and through the vegetation. It used the typical "inchworm" bounding movement and its tail undulated up and

Wisconsin, Newfoundland, and Arizona, and 3) an osprey took a meal away from an otter in Wyoming.

Gabrielson and Lincoln (1959) describe nesting mew gull during July near the study site in Alaska and state that they "are unusually aggressive in defense of the nest and young." In light of the above citations, one of the two explanations of the observed behavior patterns seem plausible at Ice Box Lake: 1) the mew gull was attempting to kleptoparasitize the otter, or 2) the gull was defending a nearby nest or territory from the intruding otter.

This study was funded by grants from the U.S. Fish and Wildlife Service and the Kuskokwim Campus of the University of Alaska-Fairbanks under the auspices of a cooperative agreement.



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Ongoing Study of River Otters in Rocky Mountain National Park

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Approximately 10 years have passed since the last river otters were released in the headwaters of the Colorado River of Rocky Mountain National Park. Since that time, spot checks and three winter surveys have been conducted by the Park, the results of which indicate that otters have been using most of the habitat along the main channel of the Colorado River, some of its tributaries, and lakes of the surrounding areas (Refer to the article by Dave Stevens in the Fall 1992 River Otter Journal). Based on visible river otter sign, the Park's 1992 survey estimated that 15 otter remain in the vicinity of their release.

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This population of otters is currently being studied by Judith Berg. Judith began her field study during June of 1992 and continued through December. During this period, she used a systematic naturalistic procedure while trekking along areas of the River, concentrating on locations where signs of otters were detected during the Park's winter surveys. After spending 327 hours in the field, she saw otter on only two occasions. Even otter signs were rarely detected during the summer months, but became more evident when the ice began forming on the river in November.

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This research project is continuing during 1993. Photographs of the river habitat and otter signs, together with a daily log kept by the researcher during 1992, will provide baseline information which she can now use for comparative purposes in the following years. A flyer distributed at the Park and near businesses alerted local residents and visitors that this project was in progress, and thus far has brought forth 22 responses of potential otter sightings. This information, combined with that gained by the researcher, will be used to determine specific locations which she will cover for the behavioral portion of the project.

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This Project is a real challenge, but Judith is a very dedicated and determined person who has had 18 years of progressive experience researching the natural behavior of a variety of mammal species - African elephant, okape, barasingha deer, Japanese serow, and Chinese goral. Her prior work was conducted in an atypical captive state, which she considers to have helped her prepare for this project, but she is now enjoying working on a project in the wild. Judith hopes that the information she gains on this otter population will contribute towards the survival of this state-endangered species.

If you have any information of sightings of river otters or their sign in or near the Rocky Mountain Park, please contact Judith Berg at this address:
Judith Berg, 9202 E. Evans Way, Denver, CO. 80231



Several members of the River Otter Alliance got together with Judith and David Berg on February 14 & 15, 1993, for a winter tracking outing along the Colorado River in Rocky Mountain Park and along Lake Granby and Shadow Mountain Reservoir. Due to an unusually heavy snow pack and recent cold temperatures, the only sizeable area of open water that we could locate was along the Colorado River between Shadow Mtn. Reservoir and Lake Granby.

We spent the day ski touring along the river and were able to locate some old (but still fragrant) otter scat, two sets of recent otter tracks, and some slides in the banks which were probably made by an otter.

Pictured in the photo are the following otter trackers (Left to Right): Carol Peterson, Judith Berg, David Berg, Leslie Malville.

A CHANGE OF HABIT

An otter went outside to play,
T'was a sunny and wonderful day,
But she saw from her ledge,
A huge mining dredge,
And decided she'd just better pray.

Where blue water had come flowing down,
There was now poisoned sludge, darkly brown,
Where there had been fish,
For a fine tasty dish,
They had left for a more fish-like town.

So she gathered her kits for a sally,
Over mountains into the next valley,
Polluted mine water,
Is no place for an otter,
To help them, we all need to rally.

By John Mulvihill

T-SHIRTS AND TOTE BAGS

We are pleased to announce that we are able to offer RIVER OTTER ALLIANCE T-shirts and totebags, provided that there is sufficient interest. Jim Morris Environmental T-Shirts of Boulder, Colorado, will print T-Shirts and totebags for us at a wholesale cost since we are an environmental group. Send us your request(s) for T-shirts and totebags before January 31, 1994. At that time, we will place a group order. If there is sufficient quantity of items ordered, we'll receive a bulk discount and the savings will be refunded to you.

Prices: \$ 15.00/T-Shirt or Totebag (price includes shipping and handling)

T-Shirts

Totebags

T-Shirts are preshrunk, heavy-weight 100% cotton. Colors include: white, ash, natural pink, light blue, light green, and black. Please indicate size (S, M, L, XL) and color.



Totebags are strong tan, cotton canvas with long web handles and squared-off bottom.

Size = 15" x 13" x 6"

TRACKING TIPS



On otter-tracking outings, we like to take along supplies to make Plaster-of-Paris molds of animal tracks that we find. Molds (the reverse image) of otter tracks enable you to see the webbing between the toes, which is not readily apparent from simply just viewing the tracks (the positive image), thus making a positive identification of an otter track!

To do this, take plastic baggies and place one-quarter cup of Plaster-of-Paris in each bag. When you've found a track that you'd like to make a mold of, pour equal parts of water in the baggie and mix by squishing the bag with your fingers (Or add amount of water specified by your package of Plaster-of-Paris). Pour the mixture into the track (you may need to build a lip around the perimeter of the track) and allow to harden in place. Once the Plaster-of-Paris has hardened, pull up the mold and allow to air dry. Brush off surrounding mud and dirt later when plaster has hardened. This process will destroy the track so take any pictures that you may need beforehand.

This is a great project to do with kids! You can build up a "library" of animal tracks from your different outings.

Note: This process works best in mud or sand but will also work somewhat in tracks in hardened snow and ice but, since it is an exothermic reaction, it will melt the snow somewhat and you'll probably lose some of the clarity of the track.

The Clearwater River Otter Project is designed to: 1) document distribution and movements, 2) determine habitat use, and 3) identify diets of river otters along mainstem and tributary riparian habitats of the Clearwater River within the Nez Perce Indian Reservation.

The three-year effort was initiated in 1990 and organized into three phases: 1) study implementation, 2) data collection, and 3) data analysis/report writing. The first phase focused on documenting distribution of otters and implanting otters with radio transmitters. Distribution was determined by a combination of mail survey returns and efforts in the field to document all otter latrine sites. Radio transmitters were surgically implanted in ten animals trapped during the spring and fall trapping seasons in 1991. River otter habitat components were mapped in the study area and daily movements and habitat use of instrumented animals were monitored during the yearlong data collection period in 1992.

Currently, the project has just initiated the data analysis phase and results of the study are still forthcoming. The findings of the study will be presented in a final report by the end of the year. Knowledge gained by the Tribe from this study will be used to develop and implement site specific mitigation plans that will help to protect and enhance river otter habitats in the Reservation and insure a continued healthy otter population in the Clearwater drainage.

NEW MEMBERS

Ray and Kathi McLean - renewal
Deborah Lewis
Margret and Bill Ellwood
Paul Polechla - renewal
Judy and David Berg
Curt Mack



A Review of the Nearctic River Otter (*Lontra canadensis*) in Southwestern North America: Ethnography, Distribution, Ecology, and Taxonomy. By Paul J. Polechla Jr., PhD

The following material is the abstract of the paper "The Review of the Nearctic River Otter (*Lontra canadensis*) in Southwestern North America: Ethnography, Distribution, Ecology, and Taxonomy," by Dr. Paul J. Polechla Jr. There is currently much concern over the status of the southwestern river otter because of the historically small populations that occur in this arid and semi-arid region as well as habitat degradation from stream alterations. An additional threat to this subspecies is the genetic contamination from other subspecies of the North American river otters which have been reintroduced into the historical range of the southwestern river otter. This paper will be published in its entirety by the Denver Museum of Natural History. If you wish to obtain a copy, please contact us or the Denver Museum of Natural History, 2001, Colorado Blvd., Denver, CO 80205.

The ethnozoology, toponymy, distribution and relative abundance, altitudinal occurrence, diet, ecology and taxonomy of the river otter in the southwest (California, Nevada, Utah, Wyoming, Nebraska, Kansas, Colorado, Arizona, New Mexico, Texas, and Oklahoma) was studied. Study methods included a literature search of biological and anthropological references, cartographic analysis, museum questionnaires, examination of anthropological museum artifacts, and visitation of verified otter localities.

Native Americans of the southwest held the otter in high regard due to its utilitarian, ceremonial, and spiritual value. At least seven tribes each had a different name for the otter. Toponymy of the southwestern U.S. reveals eleven Spanish names in the Rio Grande and Arkansas River drainages. Archeological remains of *Lontra* sp. from the Pleistocene deposits of Mexico and *Lontra canadensis* from recent deposits in Nevada have been found. A total of 51 historic specimens have been located at

Otters occur at elevations from sea level to 3,000 m. Prime otter habitat in the arid and semi-arid areas is associated with meandering streams bordered by vegetated banks dammed by beavers. Intense agricultural irrigation, livestock grazing, and severe water fluctuations have a negative impact on otters. A total of five species have been documented to have preyed upon otters: the mountain lion (*Felis concolor*), bobcat (*Felis lynx*), coyote (*Canis latrans*), dog (*C. familiaris*), and human (*Homo sapiens*). Bald eagles (*Haliaeetus leucocephalus*) sometimes steal otter's food. Although otters subsist primarily on fish (native and exotic species), they do eat crustaceans, insects, amphibians, reptiles, birds, and mammals.

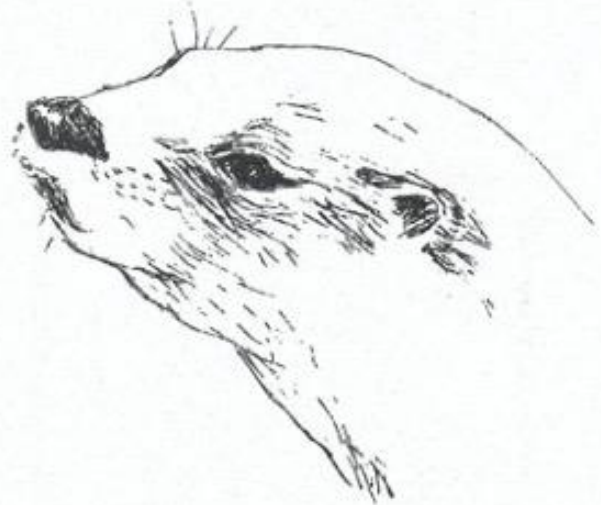
The size and shape of home ranges of otters varies upon local conditions. Otters use many natural cavities as dens. A thorough survey should be conducted for the presence of river otters in the following drainages:

museums. The nearctic river otter can be distinguished from the neotropical river otter (*L. longicaudus*) on the basis of the plantar pads, rhinarium, and skull. The Sonoran otter (*L. canadensis sonora*) can be distinguished from the other species by its large, long, and narrow skull with squarish upper first molars. The subspecies is based on only 3 specimens.

Sign of otters, including tracks, trails, slides, dens, and food remnants are described. Otters were historically trapped in the Great Plains, Rocky Mountains, Intermountain West, and Pacific Coast. A substantial otter and beaver fur trade had even been established on the Rio Grande. Currently, a legal otter trapping season occurs in Nevada and Texas. Prices of hides have ranged from \$2.50 to \$44.10.

Otters inhabit many different types of wetland communities varying from salt and freshwater marshes to rivers, reservoirs, and beaver ponds. Riparian zones act as migrational corridors for dispersal. Vegetation most often associated with otter wetlands include common species such as willows (*Salix* spp.), cottonwoods, (*Populus* spp.), alders (*Alnus* spp.), bulrush (*Scirpus* spp.), cattails (*Typha* spp.), and grasses.

Colorado River, Rio Grande, upper Arkansas River, and Platte River. Minimum in stream flow should be insured for river otter and other indigenous species.



Suggested Readings

IUCN/SSC Species Action Plans

1) *Offers: An Action Plan for their Conservation*.
Edited by Pat Foster-Turley, et al.
(An excellent book that provides an overview of
offer biology and the conservation issues that
affect all 13 species)

ISBN 2-8317-0013-2, 1991
130 pp, \$20.00

2) *The Offers*. By David Stone
(A booklet which introduces the layperson to
conservation needs of offer worldwide, and is
based on the Offer Action Plan)

ISBN 2-8317-0048-5, 1992
32 pp, color photos, \$6.00

Both books are available within U.S. from:
Island Press,
P.O. Box 7
Covelo, CA 95428
1-800-828-1302

About the IUCN - The World Conservation Union

'The World Conservation Union brings together states,
government agencies, and a diverse range of
non-governmental organizations in a unique world
partnership; some 650 members in all, spread across
120 countries.

As a union, IUCN exists to serve its members - to
represent their views on the world stage and to provide
them with the concepts, strategies, and technical
support they need to achieve their goals. The IUCN
draws together over 5,000 expert volunteers to project
teams and action groups. IUCN - The World
Conservation Union seeks above all to work with its
members to achieve development that is sustainable
and that provides a lasting improvement in the quality of
life for people all over the world.'

OFFICERS

President - Carol Peterson
Vice President - Leslie Malville
Secretary - John Mulvihill
Accountant - Charles Lehman

Scientific Advisors:

Anna Dronkert-Egnew
Joseph Davis
Curt Mack
Pat Foster-Turley
Joseph Hall
Paul Polechla
Scott Shannon

PLEASE contact us if you have any
comments, questions, or concerns.
Our president, Carol Peterson, can be
reached during working hours in
Denver, CO., at the following
number:

1-800-736-2007



It is Time to Renew your Memberships

We would like to thank you for your support and involvement with the River Otter Alliance and hope that you have found it to be a worthwhile organization.

Rather than mail a membership renewal form to each of you, we hope that you will use the opportunity provided by this newsletter. We would like to thank those of you who have already mailed in your membership renewals!

Your money is being used to support education and communication through the production and mailing of this newsletter and through a communication network of otter researchers.

MEMBERSHIP FORM

Yes! I would like to become a member of the River Otter Alliance.
Enclosed is my tax-deductible check.

Name _____
Address _____
City _____ State _____ Zip Code _____
Phone _____

Membership Level:

- \$15 Student/Retired
 \$ 25 Individual
 \$ 35 Family
 \$ 50 Sustaining
 \$ 100 Sponsoring

Please make check payable to THE RIVER OTTER ALLIANCE and mail to:
The River Otter Alliance

c/o Carol Peterson
6733 South Locust Court, Englewood, CO 80112

THE RIVER OTTER ALLIANCE

c/o Carol Peterson
6733 South Locust Ct.
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