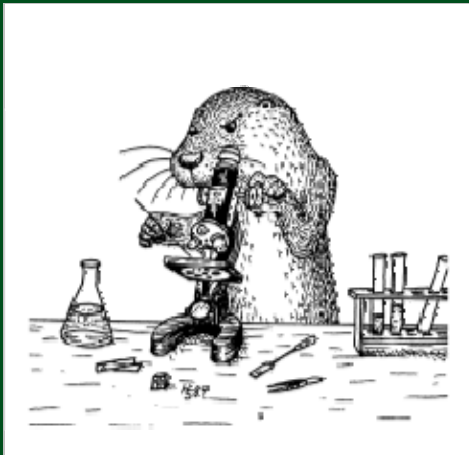


The German Otter Centre

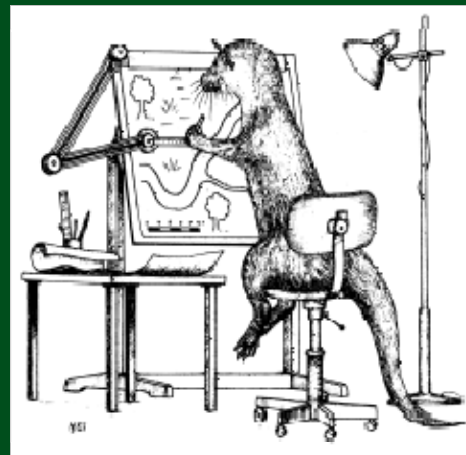
- An Example for the Combination
of Research, Education, and
Conservation Activities -

Hans-Heinrich Krüger
Aktion Fischotterschutz e.V.





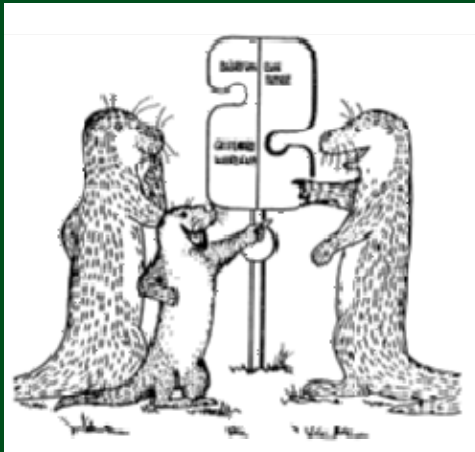
Research



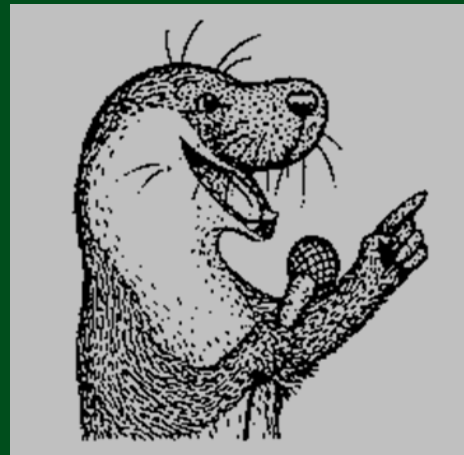
**Habitat and Regional
Development**

**European Otter
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**The four main
working files of
„Aktion
Fischotterschutz“.**



Education



Public Relations





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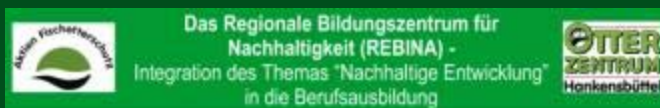
The operational part of the nature and otter conservation work is carried out by the more than 50 people staff of 'Aktion Fischotterschutz' [German Association for Otter Conservation].

They handle a wide variety of projects – of which the Otter Centre is only one among many others (though it is one of the biggest).



Naturschutz praktisch

**(RUZ) Regionales
Umweltbildungszentrum**



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The Otter Centre is
located in the northern
part of Germany in the
federal state of Lower-
Saxony.

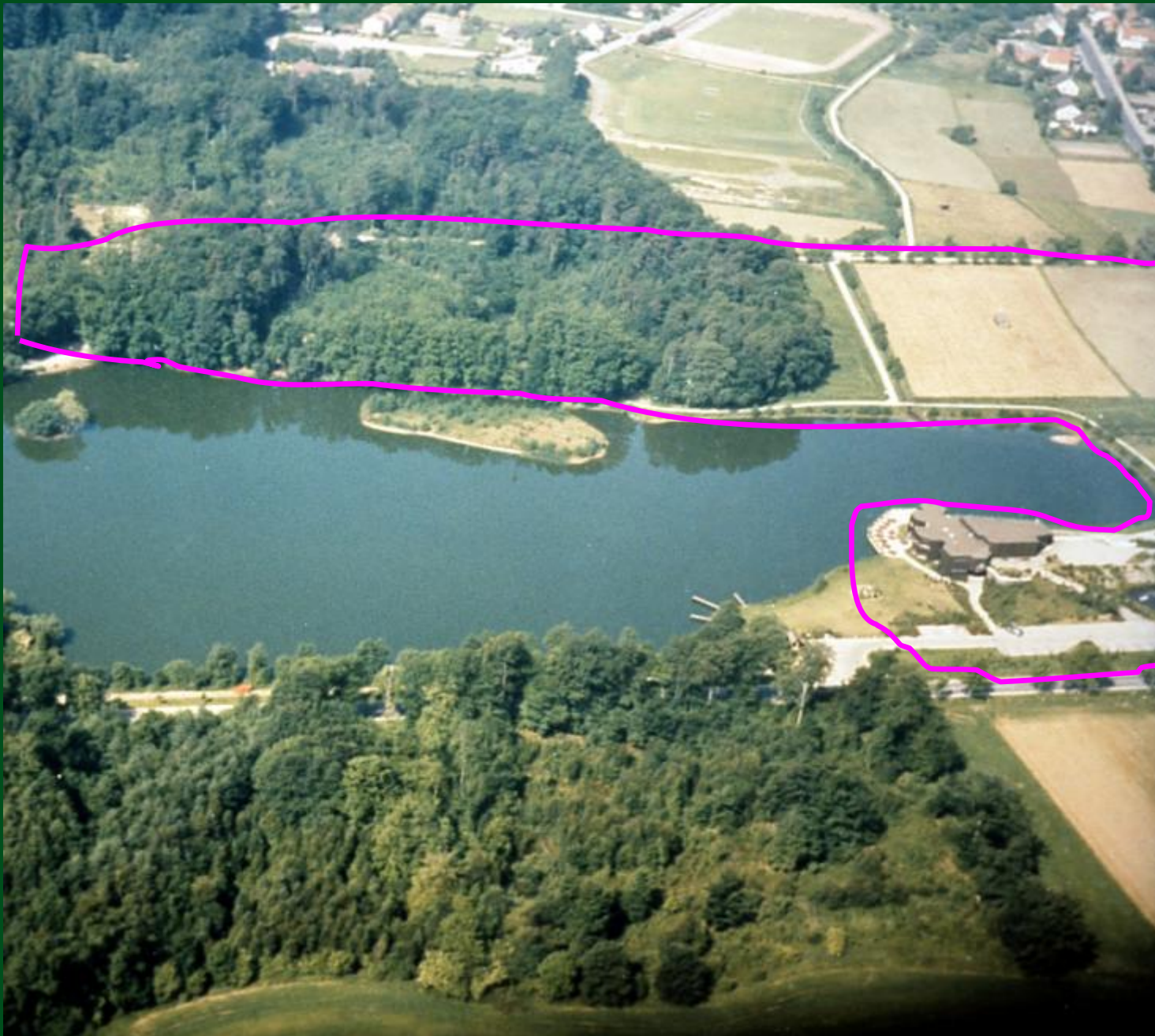


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The Otter Centre was established at the small 'Isenhagen Lake' on an area of 6.5 ha which were dedicated to the public and another 2.5 ha which are used as internal research area.

At that time this area consisted only of an intensively used meadow, a public forest, and a restaurant building of the municipality – causing high financial losses to the municipality.

**Main area of the
Otter Centre**



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**The main building of
the OTTER-ZENTRUM**

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To change the peoples attitudes to such animals like otters and polecats and to make them intereted in Mustelids, living animals are used as a kind of ,bait' – people love animals and otters (and the other mustelids) are perfect as ,ambassadors'.



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The enclosures are large and semi-natural. This is an otter enclosure. And each enclosure represents a habitat, here an natural pond.

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**Some enclosures allow
the visitors to get a view
under the water-surface.**



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The sleeping-boxes of the otters are in all enclosures the same size and form. This is important to handle the animals without stress.

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**And the animals
feel well in such
enclosures,
reproduce und the
longevity is high.**



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The amusing kind of the presentation of information makes the visitors forgetting that they are 'educated'. However, as was shown by evaluation studies in the Otter Centre, the majority of the visitors are leaving the Centre with a very positive attitude to nature conservation.

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Here you can see the underground-enclosure of an other mustelid, the stoat. The animals can be see in their natural habitat.

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And we have documented the normal breeding-behaviour of the stoats, The male mates with the young females 24 days old, the eyes are still closed.

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**Another research project was a
radio-tracking study in the vicinity
of the OTTER-ZENTRUM.**



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Since last year we have a group of the highly endangered European Mink to help to establish a captiv breeding population.



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**Beside the public part of
the OTTER-ZENTRUM a
research-area is situated.
These enclosures are
closed for the public**



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The knowledge how high otters can jump was an important contribution to increase the efficiency of the fencing of enclosures – and by this to reduce the number of losses of otters (by escaping) in zoos remarkably.

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Fish pond owners are not pleased about otters and solutions need to be developed to reduce or to avoid this conflict – for instance by special fences.

Such practice oriented tests were carried out in the Otter Centre.



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**Solutions for otters
dying in fyke-nets.**

**The Otter Centre
provides a special water
basin with a glass front
allowing to observe the
otters under water.**

**The otters are trained to
dive through a glass
tunnel to get their food
in a box above water
level.**



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**By this it can be tested
if the otters are restraint
by the different types of
stop grids to enter a
fish trap and recom-
mendations can be
distributed among
fishermen how to avoid
the drowning of otters
in their fish traps.**



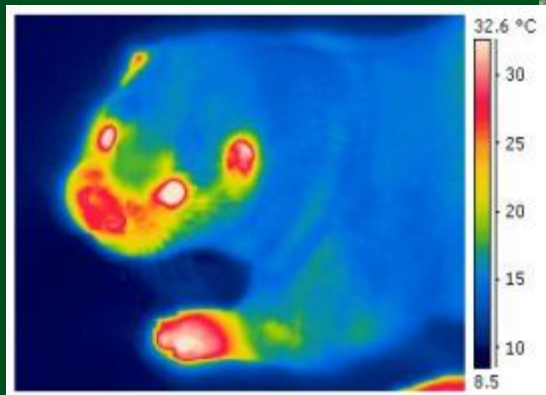
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**At the entrance of the
glass tunnel different
types of stop grids can
be attached – fixed at a
net as is the case for
fish traps.**



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**Even such basic
aspects as the optimal
diet for otters in
captivity, immobilisation
and thermoregulation
are studied at the Otter
Centre.**



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**However, research is
not limited to otters.**

**In the Otter Centre
studies are also carried
out on the other
mustelid species.**

**This is for instance a
test for the car industry
investigating the
resistance of cables and
tubes used in cars to
the bitings of stone
martens.**



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Habitat improvement.

The otter disappeared from the river Ise when this was canalised completely in the 1960's and 1970's and by this the intensity of agricultural use and waters maintenance increased remarkably.



Land use alterations

Purchase of land by Aktion Fischotterschutz	493 ha
Transformation of arable land in grassland	290 ha
Extensification of cooperation land of other owners	157 ha
Extensification by contracts with the marketing organisation ISE-LAND	<u>600 ha</u>
Total surface of long-term agriculture land use fulfilling conservation objectives in the river Ise watershed	1250 ha
Succession embankments resulting from extensification	> 40 km

Plantings

Planting of riparian woods at the rivers by Aktion Fischotterschutz	13 km
Planting of riparian woods at the rivers by cooperation partners	15 km
Planting of hedges by Aktion Fischotterschutz	6 km
Planting of spinneys by Aktion Fischotterschutz	1 ha

Water engineering measures

Extensification of maintenance of waters	> 50 km
Transformation of a mill weir in a glide ramp	170 cm/ 70 m
Removal of pipework in the mouths of tributaries	3
Connection of a pond with the Ise as an affluent	1

Supplemented by a wide variety of communication and public relations activities



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By a wide spectrum of measures the river Ise was revitalised.





1991



1992



1993



1994



1995



1996



1997



1998



2000

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**The changes, initiated
at the river Ise, became
more and more obvious
year by year.**





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**A team of employed
scientists is working on
a wide variety of studies
on habitats or on ecological
as well as economic questions
related to nature conservation.**



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By more than 50 additional events per year – seminars, workshops, exhibitions, excursions, etc. – this positive attitude and the initiated interest for nature conservation is consolidated.

Veranstaltungskalender 2003

Die Natur hat ab 9:30 Uhr geöffnet!

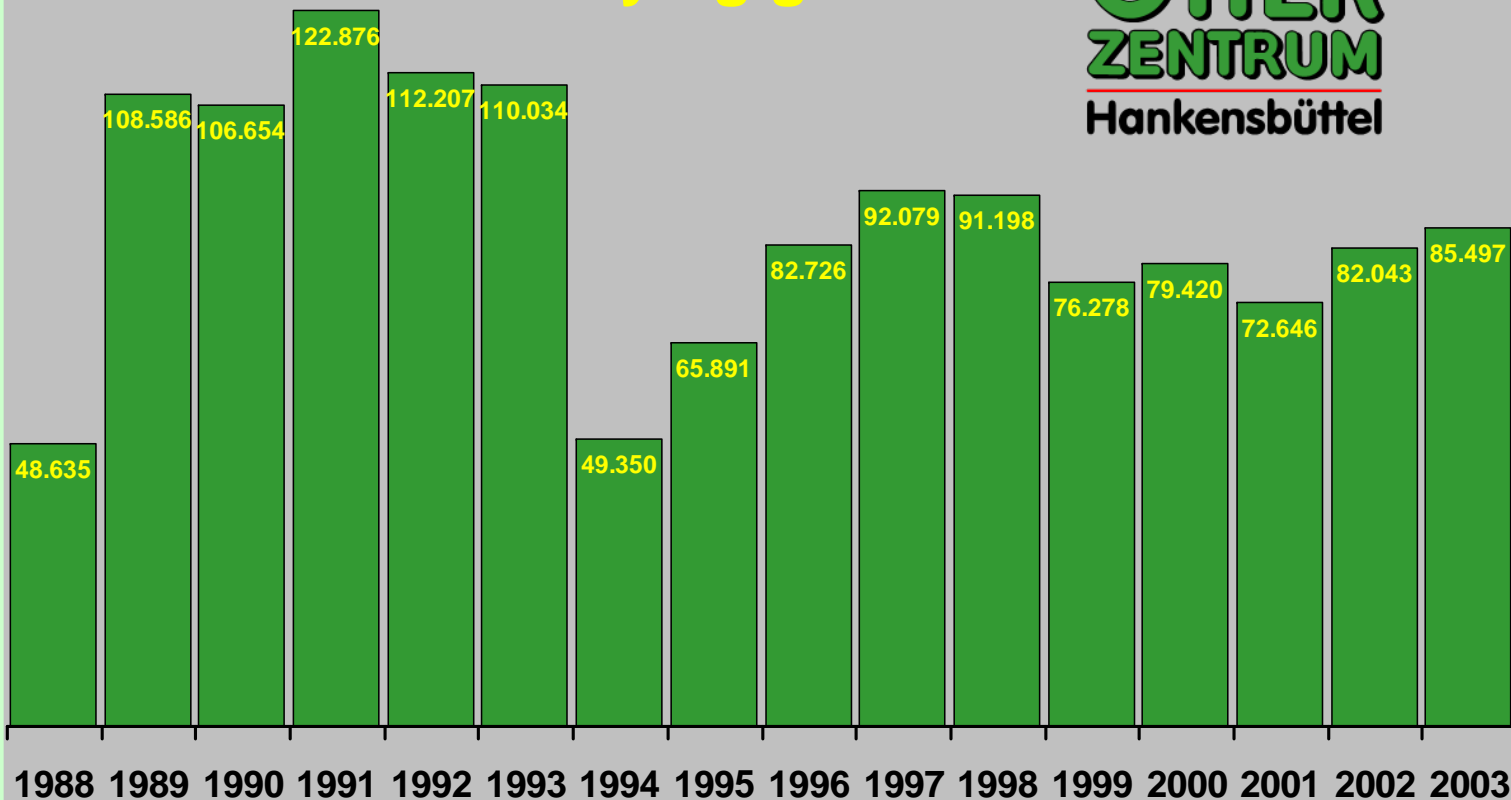


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**The Otter Centre is also
certified by the ministry
for education as an
official environmental
education centre for
schools.
This opportunity is
used by more than 500
schoolparties per year.**



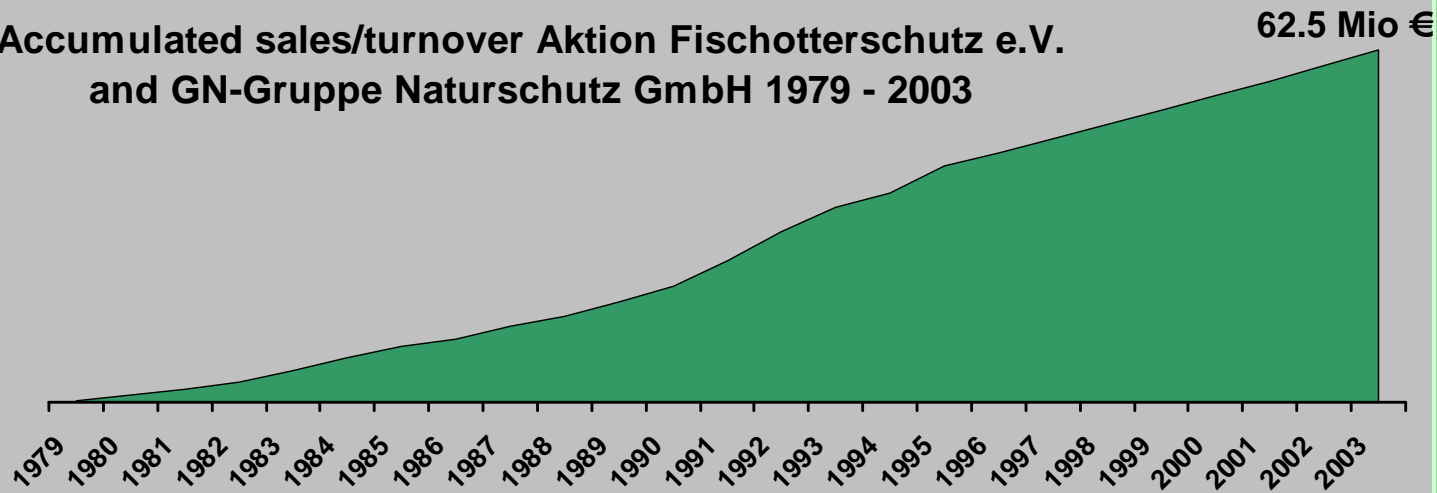
Paying guests



The Otter Centre does not receive any subsidies from the government or from the municipality. The whole maintenance of the Centre and most of its projects have to be financed by the income from the entrance fee of the visitors, by the profit of the restaurant and of the 'Otter Shop'. Investments (e.g. for new buildings, enclosures, or equipment) are mainly financed by donations of the 15,000 members of 'Aktion Fischotterschutz' or by sponsors'.



Accumulated sales/turnover Aktion Fischotterschutz e.V.
and GN-Gruppe Naturschutz GmbH 1979 - 2003



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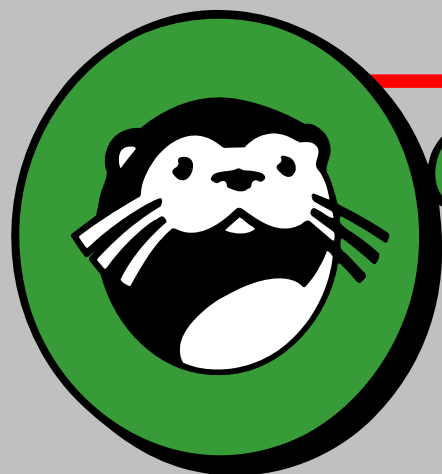
On account of the combination of attraction for tourism, high level of employees and of financial turnover – and last but not least reputation in research, nature conservation, and education – ‚Aktion Fischotterschutz‘ and the Otter Centre became an important regional economic factor.

Employees (2003):



Permanent project staff	21
Permanent commercial staff	14
Part time project staff	7
Part time public school teachers	2
Continuously changing staff (voluntary ecological year, etc.)	10
Total	54





OTTER ZENTRUM

Hankensbüttel

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Thank you for
your attention!

