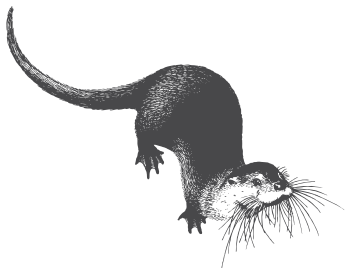


# Tools

What is life without tools? For most of us, life may seem impossible without tools. Tool making and tool use is, without doubt, an indispensable part of human society, whether we live in the developed world or in more 'primitive' societies that still rely on hand tools for agriculture, hunting or gathering. Tools, although they differ in complexity, are used by all humans. In the animal world the use of tools is rare.

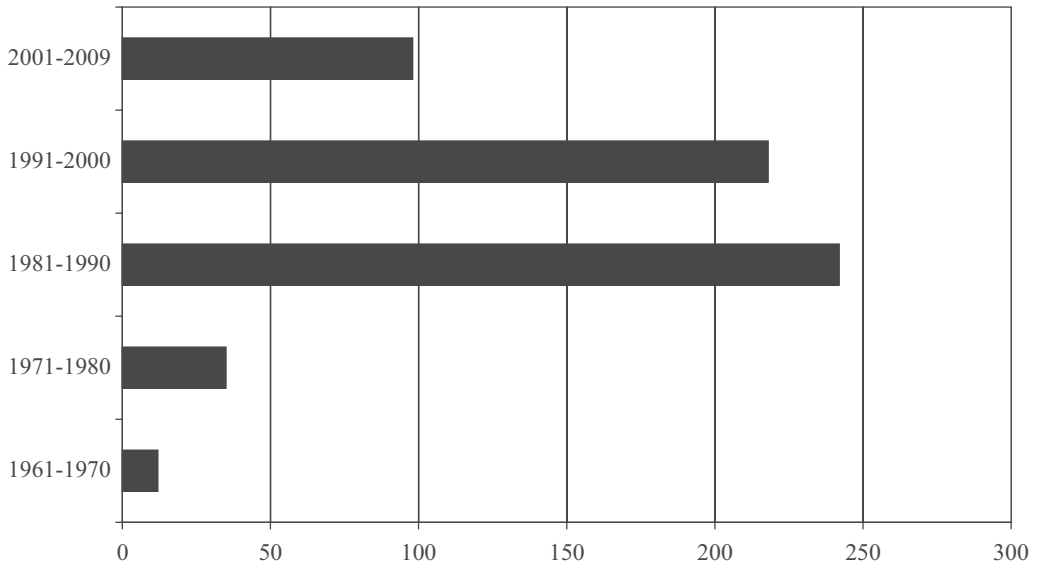
Primates are best known for their capability to recognise or design tools that may be of help in collecting food. In West Africa, for example, chimpanzees are known to use "fishing rods" to gather ants and termites, sticks to chase prey out of their dens, "shovels" to dig up roots and turnips and "hammers" to crack nuts. Remarkably, the animals also show the capacity to purposely adjust their tools to improve their performance. The type of tool and manner in which it is used may differ between different groups of the same species. For example, some chimpanzee groups use stone hammers to crack nuts and others use wooden ones. The choice of nut-cracking tool is not genetically determined, but depends on the "culture" of the clan. Furthermore, British primatologists discovered that animals that migrate to another colony may either adapt to the preferred method of nut cracking of the group they entered or introduce a new one.

Observations of primates using tools for other purposes than foraging are less frequent. One fascinating example is the use that gorillas in the Congo make of sticks to measure water depth, provide support or bridge muddy river banks during foraging in swampy areas. Another example is the use of tree leaves by orang-utans to produce alarm sounds when predators are nearby. It is assumed that the animals aim to mislead or frighten potential predators, as the low sounds made with the "trumpet" give the impression of originating from a larger animal.

But the use of tools is not limited to primates. Dolphins along the coast of West-Australia use sponges to catch fish. They select cup-shaped sponges, which they place upside down on their noses. The sponges allow them to root along the sea bottom and force their prey to leave their hiding places, without hurting their sensitive noses. As with chimpanzees, dolphins seem to teach their offspring the same trick, resulting in groups that show the "sponging" culture and groups that do not.

Mammals have also shown to be able to use man-made tools. Experiments with primates have shown that the animals purposely select the right tool for the right job. In addition to different primate species, dolphins and elephants have been shown to recognise themselves in a mirror and to use mirrors, when available, to check out body parts they normally cannot see.

To my knowledge Lutra has never presented research on the use of tools in mammals. Unfortunately, most tool-using species live outside of Europe and hence remain outside




Number of citations of articles published in Lutra.

the scope of Lutra. That does not imply that Lutra does not present remarkable and often unexpected findings, as proven by the papers in this issue on mammalian prey in Laridae (Camphuysen, De Boer, Bouten, Gronert & Shamoun-Baranes), long-term trends in hibernating bat numbers and species composition in a cave in Limburg (Grol & Voûte), and the use that water voles make of habitat refuges to avoid predation by mink (MacPherson & Bright). Secretly, however, I am still hoping for the discovery of red squirrels that use some sort of "nut crackers" or beavers that use "ropes" of plant material for strengthening their dams. And that, if such spectacular phenomena are discovered, it will be Lutra that presents the findings to the world!

Lutra itself is also a tool. It is an instrument to present new research results or interesting observations on mammals to the scientific world. The editorial board keeps looking for opportunities to improve procedures and the quality of the journal in order to better fulfill the journal's goal of being a scientific medium for mammalogists. Two recent improvements are worth mentioning. The first is that the peer review of submitted manuscripts has been changed into a "double blind" procedure, which means that the authors will not be known to the referees and vice versa. We believe with this change we can better guarantee objective and to-the-point judgements of manuscripts. The second is that, starting from Volume 54, Lutra will no longer publish articles in Dutch. English will be the only language used, since it is now the universal language of science. In practice this will not lead to significant changes, as the number of articles in Dutch has been very limited in the last decade – since 2001 only five out of ninety published full articles have been in Dutch, the last one in 2006. The Dutch summaries at the end of each article will remain.

The decision to publish only in English is strongly related to recently taken initiatives to have Lutra included in the *Web of Science* database. This database covers over 9,000 international and regional journals and book series in every area of the natural sciences, social sciences and arts and humanities. Inclusion in this database will not only give Lutra better exposure to people who use

the database to identify articles of interest, but also means that Lutra will be assigned an *impact factor*. The impact factor is a measure reflecting the average number of citations to articles published in scientific journals. It is frequently used as a proxy for the relative importance of a journal within its field, with journals with higher impact factors deemed to be more important than those with lower ones. With an impact factor Lutra can better measure itself against other journals. We believe this will be an important tool to inform potential authors about the quality of our journal and is likely to increase the number of high-quality manuscript submissions, as it is normally a prerequisite for academic authors to publish in journals with an impact factor. It is difficult to predict the impact factor that Lutra will be assigned. However, articles published in Lutra have been cited significantly more often since the 1980s (see graph). As there is always a delay of several years between the publication of an article and the moment when it is cited by other authors, the number of citations in the period 2001-2009 is likely to increase in the coming years and hopefully reaches similar or even higher levels than in the previous two decades. The inclusion of Lutra in the *Web of Science* will be decided in the summer of 2011, with the decision being based on an evaluation of the three most recent issues, starting from this one. The editorial board hopes that this initiative will act as a useful tool to improve the quality and reach of Lutra.

*Edgar A. van der Grift*