

BY MARJA MAKAROW

## Taming the wild

**T**his autumn, a bear bedded down to sleep just around the corner of our holiday house in Ilomantsi, 500 kilometres from Helsinki in the easternmost corner of Finland. The locals identified the imprint of the huge body in the grass. The bears associate the scent of humans with a hearty meal, and they no longer fear people: Some are even bold enough to steal strawberries from local gardens. Their behaviour has been altered – but not tamed – by human intervention.

It's a different story with wolves, whose domesticated brothers are today one of the world's most popular pets. Man has created

hundreds of dog breeds, each with its own distinct traits, appearance, and – sadly – genetic diseases. A beast once hunted for food or captured for herding is now a domesticated pet. The ancient wild bull offers the most extreme example of 'domestication': Today we are able to produce its meat artificially in the laboratory.

Castration is a widely used means of controlling the behaviour of farm animals and pets.

But wild behaviour can also be tamed with a softer approach, as demonstrated by animal trainer Tuire Kaimio. Using body language, sounds, and rewards, she has teased out the most amazing theatre and movie performances by horses, reindeers, dogs, birds, and even frogs. One of the famous animal actors she has trained is a lynx called Väinö, a movie star loved by children around the world. While a tasty treat is the most attractive reward for most animals, the frog craved something quite different: warmth.

Ten years ago, Kaimio was invited to Nepal by the World Wild Life Fund to tame a herd of working elephants, which are traditionally controlled by scaring them with fire. The Finnish animal psychologist was so successful with her soft approach that she became a national celebrity.

Tuire Kaimio is an expert on the workings of the brain, that complex computational device enclosed in the skull. Although behaviour can be modified

with psychological techniques, we still do not fully understand the mechanisms that underlie thinking, memorizing, feeling, and imagining.

Large-scale research programmes have been launched on three continents to deepen our understanding of the

functioning of the brain. Japan, for example, is using animal models to explore how the human mind works. A US project meanwhile aims to chart the activity of the tens of billions of neurons in the human brain. The European Union's project is developing an ICT-based tool for brain research and brain-inspired computing, with the goal of applying the research results to the diagnosis and treatment of brain disorders such as dementia, Parkinson's disease, and depression.

Humans have charted nearly a billion stars and every last outpost on our planet, but the most mysterious uncharted territory of all lies right between our ears: The study of the mind is the last true 'wild' frontier in science. ●

WILD BEHAVIOUR CAN BE TAMED WITH A SOFTER APPROACH, AS DEMONSTRATED BY ANIMAL TRAINER TUIRE KAIMIO.



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