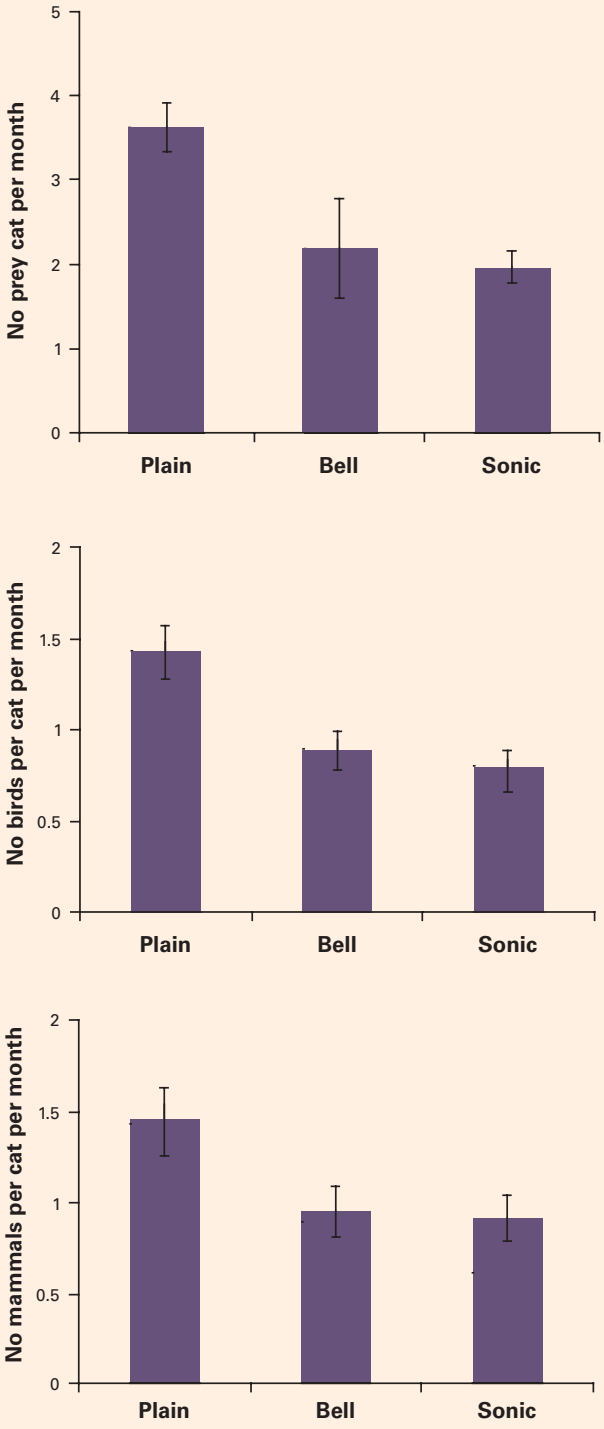
Cats and collars: reducing predation rates

There are an estimated 9 million domestic cats in the UK. Whilst not all cats hunt, there is little doubt that cats kill a very large number of birds. Whether this represents additional mortality over and above that due to other causes is unclear, and it is impossible to say whether cat predation has affected population levels of any species. Estimates of bird kill rates are sufficiently high, however, to suggest that we should adopt the precautionary principle and look for ways to reduce predation.

In summer 2003, the RSPB ran an experiment among its members to test whether collar-mounted warning devices reduced predation rates. Volunteer owners of cats known to hunt were given three quick-release collars; one plain, one fitted with a bell, and one fitted with an electronic device which emitted an audible bleep every seven seconds ('CatAlert™'). Owners were asked to fit their cat with each collar in a pre-determined random order for a one-month period. Over the three months of the trial, they recorded the prey returned by the cat.

Collar-mounted devices were successful at reducing predation rates. Bells reduced total prey returned by 31%, mammals by 34% and birds by 42%. Cat Alert reduced total prey returned by 42%, mammals by 38% and birds by 51%. Although there was no significant difference in the efficacy of a bell or the sonic device, further research and development could usefully be undertaken to see

Mean (+/- 1 se) prey return rates per cat for a one-month period by device type for all prey (top), birds (mid) and mammals (bottom).



Sonic device (CatAlert™) on a quick-release collar.

whether the effectiveness of sonic devices could be improved.

It would appear that attaching a warning device to the collar of cats prone to kill offers a partial management solution to reduce predation rates on birds. It is essential that any collar be designed with a quick-release catch to allow the cat to escape in the event of it snagging.

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The study was overseen by a steering group, including the RSPCA and the Feline Advisory Bureau to ensure cat welfare was not affected. The study was supported by a grant from The Wildlife Trusts.

Nelson SH, Evans AD and Bradbury RB (2005) The efficacy of collar-mounted devices in reducing the rate of predation of wildlife by domestic cats. *Applied Animal Behaviour Science* 94: 273–285.