

# Science for Environment Policy

## Nudging may be better than shoving: voluntary non-monetary approaches to conservation

**Voluntary non-monetary conservation — where citizens implement actions without a financial incentive** — is an emerging approach to biodiversity protection that could be applied in many countries and environments, a new study shows. This study makes recommendations for actions, such as being simple and affordable, and calls for conservation scientists to recognise their value as a complementary tool alongside traditional market-based and coercive approaches, such as payment for ecosystem services and national parks.

**Biodiversity is in decline worldwide, prompting policymakers to develop approaches to protect and maintain natural ecosystems.** Protected areas are one of the most popular tools for [biodiversity](#) conservation, covering over 10% of land globally. However, protected areas alone cannot guarantee the persistence of biodiversity and it is important to find other ways of protecting nature.

Conservation efforts established on private land for example can be very beneficial, as private land occupies a large area of the developed world. In order to overcome some of the social difficulties of conservation on private land, bottom-up approaches have been developed, including *voluntary* conservation programmes — not imposed by authorities.

Most voluntary programmes are market-based and involve compensation for carrying out conservation actions (such as under the payment for ecosystem services approach), but this can be overly costly for limited conservation budgets. Evidence suggests these approaches — while effective in many cases — may not always be the most sustainable option in the long term. An alternative but less frequently considered option is voluntary *non-monetary* approaches, which aim to encourage behaviour change based not on financial rewards but via the 'intrinsic value' of nature (its benefits independent of people), morals, or social responsibility.

There are many conservation actions that can be implemented through these approaches, but their uptake depends on several factors, such as awareness among citizens. One way to increase the take-up of voluntary, non-monetary actions is using psychological frameworks. The authors of this study use the example of the 'nudge' approach, which aims to influence behaviour (such as encouraging people to pay taxes or make better life choices) while preserving freedom of choice, and has been successfully used by the UK government. It contrasts with 'shoving', which describes strict financial or legislative approaches. One type of nudging is the use of 'default options'; if one option is presented as the default among others, it will be chosen more often than the alternatives.

The researchers analysed the literature for the key characteristics of voluntary, non-monetary approaches, which were mainly simple actions, such as providing nest boxes or leaving hedgerows uncut. Based on their findings, they say actions should be clearly defined and justified, easy to understand and implement and should not require specific scientific knowledge or specialised equipment. They should also be results-based and produce visible results in a short time period (this provides an alternative to financial reward and a method of self-verification) and costs should be low enough for people to be able to apply them without financial incentives.

*Continued on next page.*



24 June 2016

Issue 460

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**Source:** Santangeli, A., Arroyo, B., Dicks, L., Herzon, I., Kukkala, A., Sutherland, W. & Moilanen, A. (2016). Voluntary non-monetary approaches for implementing conservation. *Biological Conservation*, 197: 209–214. DOI: 10.1016/j.biocon.2016.03.013

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**To cite this**

**article/service: "Science for Environment Policy":**  
European Commission DG Environment News Alert Service, edited by SCU, The University of the West of England, Bristol.

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The researchers describe a number of real world cases, such as private forest owners in Finland keeping buffers around raptor nests to protect them from logging, and millions of nest boxes for birds being voluntarily placed in forests, farmlands and gardens.

To further demonstrate the applicability of the approach, the researchers investigated its potential for farmland conservation. They reviewed a list of actions, taken from [Conservation Evidence](#) (a collection of evidence on the effectiveness of different conservation actions), which were scored based on the feasibility of their implementation, costs, and the availability of evidence on their effectiveness. They identified 17 farmland conservation actions that could be applied using a voluntary non-monetary approach, including creating uncultivated margins around arable fields, providing food for birds and nest boxes for bees.

Although some of the actions, such as leaving overwinter stubbles, were specific to farmland, several others, such as providing short grass for birds, could be used in other open spaces including gardens and parks. The researchers discuss how best to encourage uptake of these approaches, including the nudge approach, giving the practical example of making the most easily available fishery equipment a type that also reduces seabird by-catch.

Alongside 'nudging' they also discuss the importance of interdisciplinary collaboration, citing the French programme for protecting Montagu's harrier (*Circus pygargus*) nests in farmlands as an example. In this programme, interventions are implemented by conservationists but coordinated by a NGO. The data is used by scientists to evaluate the effectiveness of interventions, which is then fed back to the network to encourage use of the most effective actions.

Similarly, in North Karelia in Finland, citizens, conservation scientists and local organisations have collaborated to protect nests of forest hawks under threat from logging in private forests. Almost all (97%) forest owners agreed to voluntarily participate in this programme, without any financial incentive, and the programme has led to major decreases in the number of nests lost to logging. Overall, the researchers conclude that the voluntary non-monetary approach is an important but currently neglected opportunity for the conservation community.

