



Use Nationally of Wild Resources across Europe (UNWIRE)

Use of wild living resources, if sustainable, can serve human needs on an ongoing basis while contributing to the conservation of biological diversity (IUCN World Conservation Congress, Amman 2000)

Results of the UNWIRE study

Many Europeans are directly using wild resources...

There are 24 million anglers, 6.6 million hunters and about 6 million bird-watchers in the EU, with possibly many more collecting fungi and wild plant products.

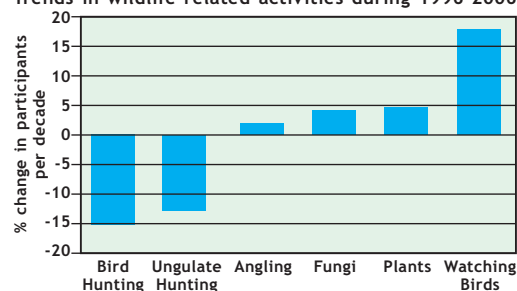
...and contribute to the European economy...

Annual spending by hunters, anglers and bird-watchers in Europe probably exceeds €40 billion. And even though no EU Member States depend chiefly on wild biodiversity, the use and conservation of our wildlife continues to make a significant contribution to the economy, to employment and to the enjoyment and well being of European citizens.

...with a variety of use patterns among groups and countries.

The survey suggests that participation in wildlife activities generally increased during 1996-2006, by up to 17% for bird-watching. Hunter numbers fell by 12-15% overall, but trends in hunter and bird-watcher numbers were most positive in states with stronger trusting relationships between these interests. Numbers of hunters, anglers and bird-watchers were least in countries with a dominance of community or state ownership or management.

Trends in wildlife-related activities during 1996-2006



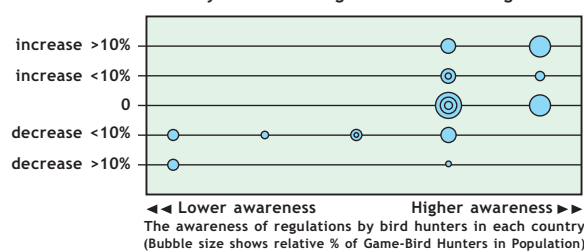
Ecosystem quality seems to be affected by social structures...

Both ecosystem quality and numbers of hunters declined most in countries with weak social integration. Ecosystem quality was considered least degraded in countries with management based on local knowledge (for ungulates) and local volunteers (for birds). Fish stocks appeared strong in countries where anglers had most trusting relationships with government.

...but not by any increasing use of wild resources...

Declines in wild resources or ecosystem quality appeared to be unrelated to increasing use of the resource (as indicated by increasing participation). Density of those collecting fungi exceeded 80 people/km² in two eastern states without declines in resources being noted, and game-bird stocks had increased in countries with high hunter density and awareness of regulations.

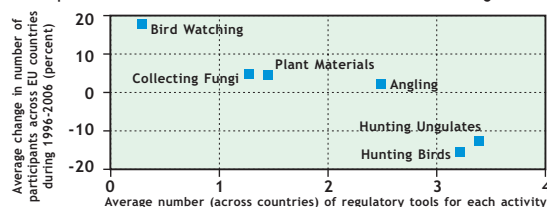
Game bird numbers were stable or increasing in countries with many hunters & high awareness of regulations



...when regulations...

Regulations were seen to be important. Hunters and bird-watchers estimated least decline in bird populations where there were good regulations. Fish habitats were deemed best where there was most regulation of angling.

Participation declines for wildlife-related activities with most regulations



...accompany financial incentives...

Financial incentives were also seen to be important. Perception of costs from wildlife was greatest where ungulate-hunting was in decline, perhaps because of perceived decline in ecosystem quality where ungulate numbers increased fastest.

...at the right spatial levels.

There was preference for regulations at national level but local implementation of financial incentives: "national sticks but local carrots". Across activities, most declines in biotope quality were observed where there was least knowledge for the resource, or appreciation of financial opportunities.





Conclusions and policy relevance

UNWIRE points to sustainable use as one effective approach to conserve biodiversity and benefit people in Europe...

UNWIRE indicates that local implementation of economic measures and use of local knowledge, as well as high level regulation that is simple and non-burdensome, is probably needed for effective conservation of wild species and the ecosystems that support them. And as millions of EU citizens are already spending billions of Euros on (mainly local) use of wild living resources, without necessarily resulting in declining populations or reduced quality of ecosystems, an opportunity exists for EU policy to support conservation by supporting sustainable use. Sustainable use of biodiversity provides benefits to local populations, without decreasing biodiversity resources or ecosystem quality. Indeed, those who use biodiversity have a strong incentive to maintain ecosystems which are wildlife-friendly.

...and identifies further steps in order to ensure effectiveness.

Still a challenge remains to balance the economic benefits of sustainable use at the local level with the costs of compliance with the regulations developed at national and international level, and to support local actors when implementing sustainable use practices while ensuring conservation of biodiversity. To this end, the following are suggested:

- To support a regular survey of spend on wild resources through official European statistical services, as an indicator of how wild resource use contributes to the EU economy.
- To showcase specific examples of how sustainable use can support conservation in various situations, especially in the wider countryside.
- To test the applicability and transferability of best practice examples in further areas and wider contexts.
- To support local decision making and central planning by providing decision support structures linking these two levels of governance.

UNWIRE is the only EU-wide case study implemented in the GEM-CON-BIO project. GEM-CON-BIO aims "to explore the interactions between governance modes and sustainable development objectives in view of identifying what governance processes and institutions can best contribute to the conservation of biodiversity."

UNWIRE concentrates on provisioning and cultural ecosystem services from wild resources (e.g. food, recreation). It investigates how governance structures (including not only regulations but also subsidies, markets and social structures) associate with trends in abundance of (a) wildlife resources, (b) the biotopes in which these resources occur (ecological sustainability) and (c) resource users (socio-economic sustainability).

UNWIRE is based on a questionnaire survey administered by the European Sustainable Use Specialist Group (ESUSG) in 18 languages and 27 EU Member States during 2007. Six resource uses were surveyed, namely: (i) hunting birds, (ii) hunting ungulates, (iii) angling, (iv) collecting fungi, (v) collecting wild plant products and (vi) bird-watching.

Further information can be accessed at www.gemconbio.eu

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