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Great bustards benefit from 'safe fly zones' over Austrian grasslands

(Photo: LIFE05 NAT/A/000077)

LIFE involvement with conserving grassland birds is not limited only to working with land owners and other socioeconomic stakeholders can also be vital partners in habitat restoration projects, like the owners of overhead power lines that span breeding grounds for great bustards in Austria.

Similar in status to the corncrake, the great bustard (*Otis tarda*) is an iconic bird for many EU conservationists. Its reputation can be attributed to a number of factors. Eminence is attached to the great bustard's distinction as being Europe's largest flying land bird, and the males' dramatic displays during mating or defence of their territory are another well known characteristic. Ironically however, it is perhaps the severe persecution suffered by great bustard populations that attracts the most attention to this important EU species.

Once prevalent in many European countries, great bustards are now found in localised pockets of steppe grassland environments. Habitat fragmentation has had major negative impacts on the species' conservation status which is officially 'declining' in Europe. Great bustards are listed as a priority bird for protection under EU laws and different LIFE projects have taken up the challenge to tackle downward trends in great bustard numbers. These projects (including those mentioned in the headline article and others that can be searched by entering 'great bustard' into the LIFE database's free text search option) are using a coordinated mix of methods to improve the fortunes for this endangered species.

LIFE has helped identify how agri-environment schemes can be used to avoid disturbing the birds during sensitive times like breeding, nesting and chick rearing. LIFE has also shown how cultivating mosaics of bustard-friendly crop varieties can have a positive impact on the pockets of remaining EU great bustards. The latter approach strengthens the bird's habitat structure and reduces problems caused by fragmentation of habitat features following increases in monoculture farming methods.

Austrian experiences

Austria's remnant population of great bustards had experienced serious problems associated with loss of the birds' natural habitats so national agri-environment measures were used to reduce risks caused by intensive agriculture. Nevertheless, other habitat problems still

persisted, mainly from development pressures for new infrastructure like overhead power lines or transport networks. These disrupt habitat functions and high voltage aerial cables were identified as a particular obstacle to recovery plans for Austria's great bustard population.

(Photo: LIFE05 NAT/A/000077)

LIFE funds offered a potential solution since the EU co-finance could be used to contribute towards the costs of dismantling overhead power cable infrastructure in sensitive bustard sites. LIFE funds could also be used to help offset costs of burying the power cables underground.. As such, a five year LIFE project was introduced in 2005 with an EU grant of around €5.8 million aimed at restoring habitat functionality for great bustard populations located in regions bordering the Czech Republic and Slovakia.

Starting its programme of work knowing that power lines collisions were then the main cause of premature death for Austria's great bustards, this LIFE project set out to remove the most problematic overhead power lines and mark aerial cables in other areas to improve their visibility for birds. Considerable successes were achieved by the LIFE project's close liaison with power companies, regulatory authorities and regional planning bodies. Results of this team work saw nearly 50 km of aerial power lines and pylons being dismantled and laid underground. Over 135 km of high voltage lines in six sites were treated with bird protection markings.

Outcomes of the habitat improvements have been monitored and indicate that LIFE's long-term investments have already made a big difference. Numbers of great bustards increased by more than 70% (from 150 to 260 individuals) during the five years from 2005 to 2010, and a new LIFE + project is now building on such impressive feats in nature conservation. Using the lessons learnt by LIFE's earlier efforts, this follow-on project (running from 2010 to 2015) is expanding the habitat improvements and broadening the reach of 'safe fly zones' for great bustards into the Hungarian border area.

Whilst power line challenges are a main focus for LIFE endeavours in this new project, other complementary habitat improvement actions are underway as well. Comparable activities in grassland sites were also implemented in parallel by the 2005 to 2010 project, and full details about LIFE's integrated programme of coordinated support for Austria's great bustard populations is available on the beneficiary's multi-lingual website.