Coming home to roost!

European Environment Agency

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It's early September and we are driving south from the Romanian city of Timişoara to try to catch a glimpse of the red-footed falcon (*Falco verpertinus*). If we are lucky, we hope to see one or two before night-fall.

Red-footed falcons are medium-sized birds of prey about 30 cm in length, with a wing-span of around 70 cm. The male is mainly slate-blue in colour, but its pinkish-red lower belly and legs give the species its name. The female is larger and mostly orange in colour, with a blue-grey back. Red-footed falcons do not build their own nests, but take over the nests of rooks (*Corvus frugilegus),* most of which vacate their nests in March to migrate to the open fields of the Ukraine and Russia for the

Photo: Eszter at the colony where she was bred in 2006 © Péter Palatitz, MME BirdLife Hungary (www.falcoproject.hu)

The Pannonian biogeographical region is one of nine regions of Europe included in the EU Habitats Directive. It stretches from south of Timisoara along the Romanian West Plain to the Hungarian-Ukranian border in the east across Hungary to the border with Austria in the west including the southern edge of the Slovak Republic and the south-east corner of the Czech Republic to the north. The full Pannonian Basin stretches into northern Serbia and Croatia and was once a huge sea reaching its maximum extent 2.5–5.0 million years ago. It is a now a major agricultural area due to the rich loamy loess soil and favourable rainfall patterns.

Photo: Timişoara Orthodox Cathedral © Gordon McInnes

summer. The falcons usually have a clutch of four eggs each year that hatch in mid-May to June. They are classified as 'near threatened' in the IUCN Red List classification.

Up until the early 1990s, there were thousands of nesting pairs of this falcon in the Pannonian region of eastern Hungary and Western Romania during the summer months.

However, after these countries became market economies in the 1990s, falcon numbers began to decline, largely due to a series of changes that affected rooks and rook nests. These changes included the intensification of agriculture and heavy use of pesticides in some areas, reductions in the numbers of grazing animals, extensive removal of trees to widen roads, and campaigns to eradicate the rooks through poisoning by farmers angry at the loss of their crops. As a result, rook populations dropped by 90 % in the 1990s. The absence of rook nests affected falcons, and less than 1 000 falcon pairs remained in Hungary and Romania by the early 2000s. However, increased recognition of the importance of rooks has led to conservation measures. Rooks are now strictly protected in Hungary, and in Romania, they

are protected from hunting during the nesting season from 15 August to 15 March.

We turn off the main road and travel along a farm track until we reach an avenue of tall poplar trees. The light is starting to fade and we can see hundreds of rooks — jet black against the reddish-brown earth — arriving in the fields close to the avenue, but not yet alighting in the trees. These are the rooks that have remained in Romania for the summer, and not flown to Russia or the Ukraine. Suddenly a few birds alight in the trees and our guide, Attila Nagy, one of the experts working within the Life Project, and a biologist and environmental engineer working for the Milvus Group Bird and Nature Protection Association (http://milvus.ro/en/about), informs us that these are the red-footed falcons we have come to see. When we look closely we can see the distinctive orange plumage of the females or the red legs of the males highlighted in the evening sun.

Photo: Roosting site near Timişoara © Gordon McInnes

Photo: Red-footed falcon eggs in a nest box © Péter Palatitz, MME BirdLife Hungary

For nearly half an hour we are captivated by the inter-play between rooks, jackdaws (*Corvus monedula)* and falcons as they chase each other in the sky and scrabble over the best places in the trees to roost.

Photo: Red-footed falcons at the roost © Gordon McInnes

More and more falcons arrive, some settling in the trees, others keeping to the electricity wires and pylons. Eventually, as the final light starts to fade, there are around one hundred falcons within view. But just as we are straining to see whether a bird is a rook or a falcon, both groups of birds begin to leave the communal roost and head for the nests they built or borrowed in the surrounding fields, where they will sleep for the rest of the night. The evening roost is over and we prepare for the next part of our journey to learn more about the red-footed falcon.

The following day we visit Körös-Maros Nemzeti Park in eastern Hungary, about 150 km north-east of Timisoara. The park is the lead organisation in a cross-border 'LIFE' project to protect the red-footed falcon. The Environmental Protection Agency of Bihor County and the Milvus Group are also involved in the project on the Romanian side. At the park, we learn more about the Pannonian region, the falcon, and the LIFE

LIFE is the EU financial instrument which provides co-funding to EU Member States and some other countries for scientific research, environmental and nature conservation management, awareness raising and training in relation to EU environmental legislation including the Birds Directive. Since 1992 when the first LIFE Programme was started, LIFE has co-financed over 3 500 projects, contributing approximately EUR 2.5 billion to the protection of the environment (http://ec.europa.eu/environment/life). LIFE celebrates its 20th Birthday in 2012 with the organisation of a range of events and competitions. A special report has also been produced: 'The Voices of LIFE: 20 year of getting things done' which focuses on the achievements made by the many people from across Europe involved in LIFE over the past two decades (http://life20.eu).

project from Peter Banfi, one of the LIFE project managers.

LIFE is the EU financial instrument that provides co-funding to EU Member States and some other countries for scientific research, environmental and nature conservation management, awareness-raising, and training in relation to EU environmental legislation including the Birds Directive. This year, LIFE is celebrating its 20th birthday. Since 1992 when the first LIFE Programme started, LIFE has co-financed over 3 500 projects, contributing approximately EUR 2.5 billion to the protection of the environment. In 2006, a project was started under the LIFE Nature Programme to restore to favourable conservation status the red-footed falcon in the Pannonian biogeographical region and to strengthen the conservation status of the rook in the region. *Falco vespertinus* is listed in Annex 1 of the Birds Directive on the conservation of wild birds, and is therefore 'subject to special conservation measures concerning their habitats in order to ensure their survival and reproduction in their area of distribution'.

Project participants have designed, built and deployed 3 400 nest boxes to compensate for the reduced number of rooks' nests. The boxes were installed in trees or on posts in areas abandoned

by rooks and attractive to red-footed falcons. Many of the boxes were adopted by school children in the region to involve them in the project and to raise awareness of the red-footed falcon and the threats it faces.

Once installed, experts and children monitored the boxes to check if they were being used. Often other birds such as the long-eared owl (*Asio otus*) would try to take over the nesting boxes, but would be challenged and expelled by the red-footed falcons. Cameras and mirrors on poles were used to check on the boxes, count the numbers of eggs, and follow the progress of hatchlings until they were ready to look after themselves and migrate south for the winter.

Photo: Red-footed falcon nestling in a nest box © Péter Palatitz, MME BirdLife Hungary

As part of the project, trees were planted to replace those that had been felled, and eventually to provide suitable sites for nests. Proceedings were taken against illegal tree felling in 14 cases. The project also gained the cooperation of energy suppliers, and purchased material necessary for the insulation of 400 km of power lines in the most critical areas, so as to avoid electrocution of birds.

Transmitters were also attached to some birds, either to check on their foraging and feeding habits, or to track their winter migration destinations. It was discovered through the project that one of a pair of birds will stay in the nest looking after the fledglings while the other forages up to 3 km from the nest. It was also shown that 80 % of the food collected was insects, mainly grasshoppers and locusts, but occasionally more nutritious field voles or toads. Red-footed falcons also prefer to catch food in

freshly-mown meadows or crop fields. Meetings were therefore held with farmers to discuss the reductions in bird populations and what they could do to help restore numbers. As a result, an agri-environmental subsidy scheme was introduced in both Hungary and Romania to promote falcon-friendly management practices over the period 2009–2013.

Use of transmitters in the project also showed that in the autumn, red-footed falcons migrated thousands of miles from the Pannonian Region across the Mediterranean Sea, Sahara Desert, and equatorial rainforest to southern Africa where they spend the European winter. They then return in early spring to where they started an incredible journey, full of risks from hunters and weather.

The Red-footed Falcon LIFE project ended in 2009 but the experts involved have continued the necessary maintenance work as part of an After LIFE programme.

On our final day, we visit Cefa fish park, which is located in Romania's Bihor County. The park is part of both a Special Protection Area under the Birds

Photo: View from Cefa Natural Park across Pannonian Plain into Hungary © Gordon McInnes

Photo: Red-footed falcons settle on power lines © Gordon McInnes

Directive (the Kis-Sarret SPA), and a Site of Conservation Interest under the Habitats Directive (the Del-Bihari Szikasek SCI). The Park provides protection for a range of wetland flora and fauna of European interest. We see several of the nesting boxes that had been installed on the edge of the fish-ponds and on trees and posts stretching across the Pannonian Plain into Hungary. Many of these boxes had been adopted by local school children who took great delight in following up on the fortunes of the boxes and the falcons during the annual migration to the area.

Both rooks and red-footed falcons live in extended communities where the two species interact and come together in communal roosts at sunset. Nobody knows for sure why they do this, whether it's for security or even to exchange news on good feeding grounds found during the day (see Mark

Cocker 'Crow Country', Vintage, London 2008). There are several collective nouns for a group of rooks, which could well apply to red-footed falcons — *parliament* and *storytelling* clearly and graphically reflect some of the ideas for the role of these roosts? Regardless of the reason, the phenomenon provides an impressive sight that attracts many birdwatchers, professional and amateur alike.

Attila who has a passion for birds of prey and has studied the red-footed falcon for many years, is pleased that so much has been learned about his favourite falcon and that steps have been taken to protect it through his earlier research and the LIFE project. 'We're on the right track,' he concludes. 'Many people have now heard of *Falco vespertinus* and it is going to become famous around the world! It is important to discuss different species, explore possibilities for funding their protection, and ensure that decisions affecting these species are made much more carefully.'

Photo: Iosef Nagy and Ovidiu Daescu observing the falcons © Gordon McInnes

By mid-March 2012, red-footed falcons had commenced their breeding at most of the nesting sites in Hungary and Romania. A lower egg count indicates food shortages in the spring, so the fact that most pairs produced clutches of four eggs suggests conditions were right for a good season. Attila and his colleagues will need to carry on in their work for the foreseeable future to ensure that conditions continue to improve for both rooks and falcons, so the Pannonian skies can stay full of these gregarious and inter-dependent birds.

Photo: Attila Nagy talks about the LIFE project © Gordon McInnes

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Front cover photo: © Gordon McInnes

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