WWF

BOOKLET

ENG

2017

CONSERVATION SUCCESS
AFTER NEARLY THREE DECADES

FALCONRY IN NE TURKEY: REVIEW AND 2015 STATUS UPDATE

Falconry in NE Turkey: Review and 2015 Status Update

Conservation Success After Nearly Three Decades

This book is produced within the Caucasus Ecological Corrridor Project of WWF-Turkey.

Authors:
Gernant Magnin,
Dr. Oğuz Kurdoğlu (Black Sea Technical University, Trabzon)

Editor: Dr. Sedat Kalem (WWF-Turkey)

Publication Officer: Özgür Gürbüz (WWF-Turkey)

English Proofreader: Simon Delany

Graphic Design: Ender Ergün

Cover Photo: Gernant Magnin

Printing House: Printworld Matbaa San. Tic. A.Ş.

WWF-Turkey
Büyük Postane Cad. No: 19, Kat: 5
Bahçekapı 34420 Istanbul, Turkey
www.wwf.org.tr

ISBN: 978-605-9903-10-3

Acknowledgments
The list of people who were instrumental in achieving conservation success in north-east Turkey during the period 1987 – 2015 runs to many pages. We would like to especially thank all the sparrowhawk trappers/owners who have been very cooperative over the years, and Nergis Yazgan and Murat Yarar from DHKD/WWF. In addition to the names above, the following people helped greatly during the 2015 field survey and drafting the report: Bahri Ataselim, Folkert de Boer, Tahsin Kurdoğlu, Ahmet Emre Kütükcü, Eylül Dizdaroğlu, Refik Lakerta, Saadettin Özkazanç, Halit Şatır and family, Johannes Jansen, Erwin van Maanen, Anna Sandor, Ilke Tilders, Wouter Vansteelant and Lars Soerink. Aykut İnce (Republic of Turkey General Directorate of Forestry) kindly allowed us to use some of his excellent pictures.

1. CONTENTS

2. ABSTRACT

The Eastern Black Sea flyway was first described in the 1960s, with incomplete counts carried out in Turkey in the 1970s indicating that hundreds of thousands of raptors converge along the eastern edge of the Black Sea in autumn. It was not until 2008 when the Batumi Raptor Count (BRC) was set up that the full extent of raptor migration was understood; systematic counts revealed a maximum of 1.35 million birds passing through a narrow corridor near Batumi, Georgia, in 2014. For centuries, local people living in this bottleneck have made use of the abundance of migrating raptors by catching sparrowhawks (*Accipiter nisus)* which they have lured to nets by using migratory red-backed shrikes (*Lanius collurio)*. Other migratory raptors, as well as trapped sparrowhawk males or unfit females were killed and fed to the red-backed shrikes.

Although the raptor killing practices had been noticed previously, it was not until 1987 that this tradition was investigated and described in detail for the Turkish section of the bottleneck, by the ICBP (now BirdLife International) and its Turkish partner DHKD (Society for the Protection of Nature). In 1987, it was estimated that a total of 15,000 sparrowhawks were trapped, of which some 3,750 were estimated to have perished as a result of the falconry tradition in north-east Turkey. A total of 9,000 red-backed shrikes were employed to act as decoys during 1987, and it was estimated that as many as 15,000 raptors were killed annually to be fed to the decoys. Thus, the total number of raptors (including sparrowhawks) that succumbed annually in north-east Turkey was around 18,750.

During 1990, DHKD published and distributed the Turkish version of the 1989 ICBP report. The ongoing killing of raptors in north-east Turkey continued to receive international and national attention. Extensive awareness raising activities were carried out by DHKD during the early 1990s exposing the general public and governments, both Turkey-wide and locally, to the fact that thousands of raptors were being slaughtered. This eventually led to widespread consensus that falconry in that form was unacceptable and immoral. Subsequent constructive dialogue between government, sparrowhawk trappers/owners and conservationists led to willingness from all sides to make concessions. Simple measures such as feeding the decoy birds

NO, OR VERY FEW

SPARROWHAWKS OR OTHER RAPTORS WERE BEING KILLED ANY MORE TO SERVE AS FOOD FOR THE DECOYS

with hard-boiled egg instead of raptor meat were taken up by trappers. The new Hunting Law (approved in 2003) and subsequent regulations allowed for, among other things, up to two sparrowhawks to be trapped and kept for a limited amount of time, and it also introduced a rigorous system for obtaining mandatory certificates. Declining numbers of sparrowhawk trappers/owners were noted from the late 1990s onwards, along with a decline in raptor killing for decoy food.

During the autumn of 2015, a short and targeted field survey was carried out to update the understanding of the status of falconry and associated raptor killing in north-east Turkey. The autumn 2015 field survey revealed that since 1987:

- The number of sparrowhawk trappers and sparrowhawk owners had decreased by up to 50%;
- The number of trapped red-backed shrikes and sparrowhawks had also gone down by up to 50%;
- No, or very few, sparrowhawks or other raptors were being killed any more to serve as food for the decoys.

This report describes the situation in 1987 and in 2015, as well the actions undertaken to remedy the situation. Finally, it performs a quick analysis to assess the impact of the various measures taken.

Trapper at his hide near Arhavi, 2015.

3. RAPTOR MIGRATION THROUGH NE TURKEY

The Eastern Black Sea flyway was first described in the 1960s in Turkey, with incomplete counts carried out in the 1970s indicating that hundreds of thousands of raptors converge along the eastern edge of the Black Sea in autumn. Indicative sightings and reports also came from the Georgian part of the bottleneck, especially from Batumi, close to the Turkish border, but even as late as 1998 it was estimated that the total number of birds passing through was "in the order of tens of thousands" (van Maanen *et al.* 2001). It was not until 2008 when the Batumi Raptor Count (BRC) was set up that the full extent of the magnitude of raptor migration was understood and over 800,000 birds were counted in the first year (Verhelst *et al.* 2011). Systematic counting methods and area coverage were improved over the following years and eventually in 2012 the magical 1 million raptors mark was passed; this feat was repeated in 2013, 2014, and 2015, with a maximum of 1,35 million birds of prey in 2014. The BRC systematic counts propelled the Eastern Black Sea Route into an *elite* global list of four sites where over a million raptors pass through, the other sites being Veracruz (Mexico), Keköldi (Costa Rica), and Eilat (Israel) (Shirihai *et al.* 2000; Zalles and Bildstein 2000, in Jansen 2013). Although the exact routes of raptors are still unclear, there is no doubt that all birds that pass through the Batumi bottleneck also migrate through Turkey.

THE BRC SYSTEMATIC COUNTS PROPELLED THE EASTERN BLACK SEA ROUTE INTO AN ELITE GLOBAL LIST OF FOUR SITES WHERE OVER A MILLION RAPTORS PASS THROUGH

During autumn, migratory raptors on their way to their wintering grounds converge in a narrow corridor between the eastern end of the Black Sea and the mountains of the Lesser Caucasus. The weather conditions, and especially the occurrence of clouds at higher altitudes and suitable winds, dictate the extent to which birds converge along the coast after passing Batumi (Vansteelant *et al.* 2014, Vansteelant 2016). When the weather is fair, it seems that most travel up the Çoruh river valley that takes them to Borçka in Turkey, across the mountain ranges without the need from Batumi to cross 2500 metres or higher peaks. But when weather conditions are not favourable they follow the coast further southwest and try any of the following south or south-east running valleys (most of

Map showing a basic representation of raptor migration paths in autumn in north-east Turkey. The route on the far right, top, is the route through the Çoruh river valley.

these will require scaling 2500 metres ridges). It is thought that raptors will turn south before reaching the city of Rize, some 120 kilometres south-west of Batumi. The map above gives an indication of the most used migration paths. Weather influences, especially rain and cloud cover, are most relevant for medium-sized and large soaring birds such as buzzards and eagles, while smaller migrants that use flapping flight, such as falcons and sparrowhawks (*Accipiter nisus)*, probably shift migration routes more in relation to side winds. The latter group also does not converge at geographical bottlenecks: Large numbers of such species are migrating along the coast, most likely to prey on migrant passerines which aggregate there.

© AYKUT İNCE/OGM

4. FALCONRY IN NE TURKEY

The information presented in this chapter is largely based on the original 1987 study as published by ICBP in 1989 (Magnin, 1989), augmented and modified as a result of new information obtained during numerous visits to the area in subsequent years.

4.1. Background and Methodology

Falconry has long been practised throughout Turkey. Kumerloeve (1966) mentioned that falconry already flourished during the times of the crusades in the 11th and 12th centuries. In recent years, falconry as practised with iconic species such as saker (*Falco cherrug)* and peregrine (*Falco peregrinus)* particularly in Mongolia, Central Asian countries and the Arabian Peninsula, has largely disappeared from Turkey. Falconry appears to have continued unabated in only one area: north-east Turkey. Sandwith (1856, *in* Bijlsma, 1987) mentioned the popularity of hunting with sparrowhawks near Trabzon, whilst Kumerloeve (1966) estimated that many hundreds of falconers were active in the area. The trapping of sparrowhawks and killing of other raptors to provide food for the decoy red-backed shrikes was noted by the British ornithologists who first explored the Eastern Black Sea flyway in the 1970s, and Woldhek (1980) estimated that possibly several thousand honey buzzards (*Pernis apivorus)* were shot annually. In view of the alarming decline of many European raptor species, the International Council for Bird Preservation (ICBP, now BirdLife International) agreed in 1987 to support a mission to assess the methods and scale of falconry in north east Turkey. The mission was financed by the Netherlands Comité Bescherming Trekvogels/Vogelbescherming and the British Stop the Massacre Committee, and ICBP then commissioned the first author, who travelled to Turkey and stayed in the area east of Rize during the period 31 August – 4 October 1987. The second author was a resident of Arhavi, studied Forestry at the University of Istanbul at the time, who was preparing a Master's Thesis on birds of prey, in particular falconry in the region, and conservation of birds; and he teamed up with the first author from day one. Together, or accompanied by local volunteers and members from the nascent Turkish conservation organisation (and later BirdLife Associate Partner) DHKD, they visited in 1994 hundreds of localities and talked to hundreds of local people and sparrowhawk trappers/owners, in order to establish how and where sparrowhawks were trapped; to understand who was involved, whether there was any trade in trapped birds, etc.

KUMERLOEVE (1966) MENTIONED THAT FALCONRY ALREADY FLOURISHED DURING THE TIMES OF THE CRUSADES IN THE 11TH AND 12TH CENTURIES

Roughly, there are three groups of people involved in the sparrowhawk saga in north-east Turkey: The trappers who

trap and own birds, the owners who obtain a sparrowhawk from a trapper and mainly treat them as pets, and the falconers who own a sparrowhawk and go out to catch quail (*Coturnix coturnix)*, and the occasional corncrake (*Crex crex)*. As explained in detail later, there is much overlap between the three categories, and the number of people who go out hawking for quail is so small that we have chosen to refer to *sparrowhawk trappers/owners* when referring to all categories and when the distinction is not essential.

4.2. Trapping of Sparrowhawks

Firstly, mole crickets (*Gryllotalpa vulgaris)* are caught by pouring soapy water into holes in the ground, or by digging, mainly during August and early September. A single mole cricket is subsequently put in a simple wire cage with a trapdoor (locally called a 'ragi'), and the trap is put out to catch migratory red-backed shrikes. The shrikes, chiefly juvenile birds, are carefully fitted with a glued leather cap over their eyes (leaving a narrow gap on the underside for them to see their perch) so that they will dance behind the net and not instinctively dive down

Mole cricket in trap and approaching red-backed shrike.

© GERNANT MAGNIN

Bag net in tree, near Pazar, 1994.

© GERNANT MAGNIN

Sparrowhawk caught in a bag net suspended from a building, Arhavi, 1987.

© LARS SOERINK

Red-backed shrike trap for sale in a hunting shop in Arhavİ, 2015.

upon the approach of a sparrowhawk. The shrikes are then tied to a metre-long stick with a 50 cm length of thin rope. A lump of meat is tied onto the stick and replaced daily; the meat was formerly from raptors that were trapped or shot for the single purpose of feeding the decoys.

Trappers construct simple hides at vantage points and erect a 3 metre-high triangular or rectangular net (sometimes two nets in an L-shaped formation). When a low flying sparrowhawk approaches, trappers flutter the decoy bird behind the net so that it 'dances'; when a sparrowhawk hits the net, this slips off the poles and the bird becomes trapped. The trapper releases birds he does not need right away, and all others are wrapped in a piece of cloth and taken home.

In some cases, trappers use what they call "bag nets" at vantage points; small one metre square nets suspended from buildings or trees, near corners and ridges, where sparrowhawks are thought to swoop around the corner at high speed and try to surprise prey. The trapper then checks the net on a daily basis. This method is often criticised as trapped birds may remain unnoticed

Red-backed shrike on its stick, Hopa, september 2015.

© LARS SOERINK

A sparrowhawk photographed at the moment it hits the net. Picture taken in neighbouring Georgia in 2015. The techniques used in Georgia and Turkey are identical.

in the nets for hours and die. During the mid-1990s the use of these nets was strongly condemned by DHKD and then newly emerging sparrowhawkers societies turned against their use.

Trapping chiefly takes place in the 100 km-long and 10 km-wide coastal strip that starts just east of Rize and includes the villages of Gündoğdu, Çayeli, Pazar, Ardeşen, Fındıklı, Arhavi, Hopa and Kemalpaşa. Literally tens of thousands of localities (found mainly from sea level up to 700 metres altitude, but occasionally trappers are active at vantage points at 2,000 metres) are suitable for trapping, and many trappers 'prepare' several sites and use the one that suits them best given the weather conditions and the number and behaviour of migratory sparrowhawks. The trapping sites are hard to find in the often dense vegetation, but are often on or near the ridges. The İsina Hill above Arhavi is the only known site where trappers appear to concentrate, and where hides are positioned in a much 'barer' landscape as several slopes have been reforested after forest fires. There are some localities further inland where sparrowhawks are caught at higher altitudes, notably around Borçka and Murgul. Some of these areas were inaccessible as they were military border zones until the early 2000s, and it

is thought that only a few people then started to go there for sparrowhawk trapping.

Very rarely, sparrowhawk chicks are illegally taken from the nest (they are not an uncommon breeding bird in the north and west of Turkey). It seems generally unclear what the advantage is of using local birds that were hand-reared: They are the same size, and according to their owners they are no better quail catchers in spite of the longer accustomization and training they have been through. Also, the effort to locate an active nest in the extensive Turkish forests seems to be much greater compared with trapping a migrant bird during the autumn.

4.3. Training and Keeping of Sparrowhawks

Only female sparrowhawks are sought, and males are normally released immediately after capture. At home, sparrowhawks are equipped with jesses around each leg, as well as one around the belly, the latter to prevent leg-injury when the bird falls off its perch. Small metal bells are often fitted on each leg, and a slightly larger one on the lower back.

What falconers call 'training' refers basically to the owner accustoming the bird to human touch, by carrying it around

Sparrowhawks in a tea-house in Pazar, 2015.

© LARS SOERINK

the village on his arm, stroking it, and feeding it bits of meat. In addition, some falconers use live quail (normally farm-bred birds, widely available in Turkey) to accustom the sparrowhawk to the taste of quail.

During the day, birds are often put on perches outside shops and tea houses, or around the house of the trapper. At night, they are put on a perch inside a barn or shed. They are fed with meat or eggs, and some falconers occasionally feed them whole house sparrows (*Passer domesticus)*, or pigeons (*Columba livia domestica)*, apparently in order to trigger cleaning of the crop.

4.4. Falconry and Local Communities

"HAPPINESS IS TO HAVE A GOOD HORSE, A DOG AND A SPARROWHAWK"

The Caucasus is one of the most cosmopolitan regions on Earth, with high ethnical diversity. The engagement of local people in falconry in such a diverse area is probably hidden in a Mingrel (an indigenous community) proverb which says "*happiness is to have a good horse, a dog and a sparrowhawk"*. The practice of falconry in the area is believed to be inherited from these indigenous peoples.

The area covered in this report overlaps largely with the distribution of the Laz Turks, an ancient community with its own language. They are descendants of the kingdom of Lazica that flourished during Roman times and became Christian in the 4th century AD. The Laz people are also considered an arm of the Sakha Turks and were ruled by Byzantines, Persians and the local Georgian forces in the following centuries. The area was occupied by Mongolians in the 13th century and then became part of the Ottoman Empire in 1461 after which the Turkish population started dominating. In 1920, the area was divided between Turkey and Georgia along present day borders. Over the centuries most of the Laz people have become Muslim under Ottoman rule; however they have also preserved much of their cultural assets. Many of the circa 75,000 Turkish Laz speak, their own language (in addition to Turkish), which is considered one of the four ancient Caucasian languages. Over the centuries, some ethnic Turks have also become Laz speakers.

Although today falconry in NE Turkey is mainly attributed to Laz people, it is without doubt that the tradition of falconry has been an important part of the Turkish culture for centuries.

4.5. Sparrowhawks and Falconry

Formerly, sparrowhawks were caught for three reasons: In order to provide birds for the sultan and dignitaries to practise falconry; to provide a means for local people to hunt game and thus supplement their diet; and to provide a seasonal 'pet'. Sparrowhawks were chiefly used to hunt migratory quail that used to migrate through the area in vast numbers. Until the 1960s, when many of the Black Sea villages were still isolated and not yet connected to the main road system, hunting quail with sparrowhawks was widespread and we are aware of local recipes to pickle quail and preserve them for winter. The coastal road from Rize up to the Georgian border was completed in the mid-1970s. This, and other factors such as the introduction of inexpensive and widely available hunting guns, the dwindling numbers of quail in recent decades (BirdLife International, 2015), and changes in lifestyles, led to hunting of quail with sparrowhawks becoming only a marginal but very sociable component of falconry in north-east Turkey. Today, quite a few people will go out just once or twice, in small parties, during late September and October, and fly their birds in the narrow

The first statue portraying falconry in Turkey was built in Arhavi in 1993, with a total height of 4.80 m, 2015.

© AYKUT İNCE/OGM

Leather caps are put over the red-backed shrike's eyes.

© LARS SOERINK

Tea-house in Pazar, a stronghold of falconers, 2015.

fields along the coast, but it is never an intensive or prolonged activity. Stories abound of people taking their birds to the plains beyond Ardahan and Kars where quail are said to be easily found, 300 kilometres from the Black Sea (and now 5 hours by car, but 7 hours twenty years ago), but practically always, on closer inspection, these seem to be isolated instances or exaggerations.

Of the 224 sparrowhawk owners interviewed by Kurdoğlu during 2013-2014 (Kurdoğlu in prep), less than 10% claimed to have the intention to go out and try quail hunting, the rest quoted their love for the birds as the main reason to engage in this tradition.

OF THE 224 SPARROWHAWK OWNERS INTERVIEWED BY KURDOĞLU DURING 2013-2014, LESS THAN 10% CLAIMED TO HAVE THE INTENTION TO GO OUT AND TRY QUAIL HUNTING, THE REST QUOTED THEIR LOVE FOR THE BIRDS AS THE MAIN REASON TO ENGAGE IN THIS TRADITION

When sparrowhawks are used for hunting, often on Sundays, falconers stroll through corn and tea fields along the larger river beds or along the coast (the latter has become a rare habitat since the completion in 2010 of the massive coastal road that now stretches along the entire eastern half of the Turkish Black Sea coast). The sparrowhawks are then sometimes stripped of their jesses and the falconer keeps the bird in his hand like a spear; when a quail is flushed the sparrowhawk is thrown towards it with a javelin's motion. Only occasionally, a sparrowhawk escapes during the hunt.

Van Maanen *et al* (2001) mentioned that in Georgia there are two ways of hunting with the sparrowhawk, viz the Lazian style as described above, and the Gurian style whereby the sparrowhawk flies off the arm of the falconer. We have never seen or heard about the latter in Turkey, and also, during a visit to Georgia in 2015, we did not encounter anyone who claimed that the Gurian method was suitable. Given the type of dense habitat prevailing here, the fact that sparrowhawks naturally hunt whilst already on the wing, and given the flying-speed of flushed quail, it seems somewhat more logical to have a jump start (c.f. Turkish Falconry, 2013).

4.6. Sparrowhawks as Pets

By and large, sparrowhawks are caught and kept as pets, exclusively by men, during September and October. In roughly the same area as mentioned above, individual sparrowhawks can be found on their perches in or around many of the farmhouses that occupy much of the coastal strip; ownership within the townships and villages is probably less, but sparrowhawks are more apparent here as they are carried around by their owners

who put them on perches outside their shops and tea houses. Congregations are found in certain tea houses and since the advent of sparrowhawkers societies up to 30 can be seen at designated society places, mainly in Ardeşen, and Pazar. Here, men discuss the merits of their sparrowhawks, feed them with eggs or pieces of meat, and even carry out first-aid operations such as carefully putting back lost primaries. Rough handling of the birds is considered inappropriate and good care is urged.

A portion (we estimate between 5-10%) of the sparrowhawks in captivity are claimed to die as a result of a disease locally called *kursak hastalığı* (crop disease) or *kestane karasi hastalığı* (chestnut-black disease). This disease is characterized by black

Man with sparrowhawk ready to be launched at quail, Pazar, 1987.

droppings and vomiting, and is hard to cure. Generally, birds contract the disease soon after capture, indicating that it may be merely the result of the trauma that is the consequence of the shock of capture and sudden captivity.

Very few sparrowhawks are kept all year round and most are released by late October and during November.

Owners frequently take sparrowhawks along when they travel, and sightings of men and their birds from places as far away as Istanbul (where a handful of sparrowhawk certificates is being issued, see below) are frequent. We believe that most birds were originally caught in the area covered in this article, although there are confirmed individual cases of people trapping sparrowhawks elsewhere in the Black Sea region of Turkey.

4.7. Trade

Urban legend has it that astronomic sums are paid for sparrowhawks by traders from Saudi Arabia or Central Asia, but while there is no doubt that money is occasionally paid for large, strong or white birds (called *'ispiri'*), we are convinced that these

Proud sparrowhawk owner in Pazar, north-east Turkey, 2015.

are very rare events. There is an abundance of sparrowhawks during September and birds are given away to relatives or friends, traded for a pack of cigarettes, or sold for a few Turkish Lira. There is no regular trade of any sort. In any case, the sparrowhawk trade is illegal and considered unethical by the majority of people.

We also dispute that birds are traded on any significant scale to or from Georgia. This was again confirmed in personal communications with reliable sources in both Turkey and Georgia during 2015. Apart from being illegal, there is no logical financial incentive to do so. However, it seems likely that the handful of peregrines caught every year are sold for considerable sums.

Similarly, there was no evidence found of any trading of red-backed shrikes or mole crickets. However, some falconers pay a few Turkish liras to local children for the mole crickets they collect. There is some very nominal local business involving

A sparrowhawk that lost a primary is carefully 'repaired' by using a toothpick, some glue, and the lost feather. Pazar, 2015. (Left)

Man with sparrowhawk, Fındıklı, 1987. (Right)

© LARS SOERINK

© GERNANT MAGNIN

the sale of bells, jesses and red-backed shrike traps, most items being made locally or regionally, and often handcrafted by the trappers themselves. The nets are either bought or made by the trappers themselves; as there is little wear and tear they are normally used for many years.

4.8. Numbers of Sparrowhawks and Red-backed Shrikes Trapped

In 1987, it was estimated that a total of 15,000 sparrowhawks were trapped, of which some 3,750 (25%) were males or lean females subsequently fed to the decoy birds, or succumbing to disease; 4,950 (33%) were surplus or considered unfit for falconry and were released immediately after capture, while the remaining 6,300 birds (42%) were kept in captivity and released too late to continue migration and would most likely have perished during the winter. Thus, some 10,000 sparrowhawks were estimated to have perished as a result of the falconry tradition in north-east Turkey.

However, new insights resulting from counts and research in the region suggest that sparrowhawks rarely migrate all the way to the Sahel and many may in fact survive if they remain in Turkey

Local men with their sparrowhawks, Ardeşen, 1987.

or adjacent countries during the winter. There is little or no firm data to date, and only recently just under 300 sparrowhawks (mainly migratory but possibly also resident birds) were ringed in Georgia as part of the raptor monitoring activities in and around Batumi. Remarkably, one sparrowhawk, ringed in October 2014 in central Georgia was found dead in Tokat, central Turkey, during February 2016, indicating overwintering in Turkey (https://ringbase.org/rings/16270/). With the benefit

© GERNANT MAGNIN

Boy with sparrowhawk, Ardeşen, 1987.

WITH THE BENEFIT AND LUXURY OF HINDSIGHT, AND UNTIL MORE RESEARCH INTO SURVIVAL HAS BEEN CARRIED OUT, IT SEEMS MORE REALISTIC TO ESTIMATE THAT AT THE TIME SOME 3,750 SPARROWHAWKS WOULD HAVE DIED AS A RESULT OF THE FALCONRY TRADITION IN NORTH-EAST TURKEY

and luxury of hindsight, and until more research into survival has been carried out, it seems more realistic to estimate that at the time some 3,750 sparrowhawks would have died as a result of the falconry tradition in north-east Turkey.

A total of 9,000 red-backed shrikes were estimated to have been employed during 1987 to act as decoys. As red-backed shrikes all spend the winter in the Sahel, and as they have probably lost their urge to migrate by the time they are released by mid-October, it was assumed that a large proportion of these birds may not have survived the winter.

4.9. Shooting and Catching of Raptors

Many historical sources refer to the killing of raptors associated with falconry. During the 1987 study, it was confirmed that raptors of all sizes were trapped and shot in order to supply the meat needed to keep the decoys alive during the course of the trapping season. The sparrowhawks will also very rarely be fed raptor meat. In 1987, the surroundings of trapper's hides were littered with empty cartridges and torn-off wings from raptors, and at favourite trapping sites such as the İsina Hill near Arhavi with 25 trapping installations (15 of which were operated on several dates during 1987) and the Opurmole Hill near Hopa with 13 hides (9 of which were operational at one time), the sound of gunfire was deafening on many days. Practically all trappers were carrying guns.

During 1987, it was concluded that at the time hunters would prefer to catch raptors in the net so as to save money on cartridges which were then still expensive; a long list of species other than sparrowhawks were lured to the net, including osprey (*Pandion haliaetus)*, Levant sparrowhawk (*Accipiter brevipes)*, harrier (*Circus* sp.), black kite (*Milvus migrans)*, hobby (*Falco subbuteo)*, kestrel (*F. tinnunculus)*, and booted Eagle (*Hieraaetus pennatus)*. Caught birds were often kept alive until the Red-backed shrike needed to be fed; trapped or shot raptors were only crudely slaughtered, in the sense that the wings were simply torn off the bodies. Only the breast muscles were fed to the decoys. Male or unfit sparrowhawks were also killed and fed to the decoys.

Based on interviews with 25 trappers in the Arhavi area, and on field observations, it was estimated that for every sparrowhawk

© GERNANT MAGNIN

Booted eagle, food for the decoy.

© OĞUZ KURDOĞLU

A kestrel dives for the decoy, only to be fed to that very same bird later, Arhavİ, İslna Hill, 1987.

caught during 1987, one other raptor would be trapped or shot and fed to the red-backed shrikes. The total number of raptors (including sparrowhawks) that succumbed each year in north-east Turkey at that time was thus probably around 18,750.

The pressing need to find fresh meat to feed the decoy birds was also testified by a trick we noted for the first time in 1987 and still found used in 2015; two small pieces of wood or matchsticks are tied in a cross, covered in aluminium foil, and spun on a stick behind the net. Passing Bee-eaters are frequently caught using this method.

It is imperative to emphasize that the killing of raptors in north-east Turkey was only to secure food for the decoy birds. Unlike the widely established custom in neighbouring Georgia, where especially honey buzzards are consumed, hunters in north-east Turkey never eat the meat of raptors. Residents from Arhavi who were born in the 1930s informed us that even during periods of famine before and during the Second World War, raptors were not consumed, due to religious and ethical reasons.

Trapper with bee-eater lure, Pazar, 1987.

Bee-eater lure, Arhavİ, 2015.

Anecdotal evidence from 'systematic' trapping and shooting of raptors from other regions in Turkey is available from the Hatay province in southern Turkey (e.g. Meyburg, 2005), and a provisional survey there in 2006 by a student from Artvin Çoruh University (O. Kurdoğlu, 2015, pers. comm.) indicates that raptors may be consumed locally. More systematic work into the methods and extent of raptor killing especially in the southern provinces is needed.

Pictures taken in 1987, around Arhavi and Hopa, showing armed trappers and caught or shot birds of prey.

© GERNANT MAGNIN

Wings collected around a trapper's hide at the İslna, Arhavİ. including remains from Montagu's harrier, two harrier sp., honey buzzards (juvenile and adult male), two hobbies, marsh harrier, kestrel, and a Levant sparrowhawk.

© GERNANT MAGNIN

Trapper with freshly shot booted eagle.

© GERNANT MAGNIN

Trapper with Montagu's harrier, later to be killed.

© GERNANT MAGNIN

Trapped hobby, destined to be fed to the decoy later.

© GERNANT MAGNIN

Common buzzard on a piece of rope to be killed later.

© GERNANT MAGNIN

Trapper and his grandson at their hide.

© GERNANT MAGNIN

Goshawks are very rarely caught.

© GERNANT MAGNIN

A rare and valuable trapped Peregrine, photographed in Arhavİ.

© GERNANT MAGNIN

Trapper returning home with trapped sparrowhawk and a trapped pallid harrier to be fed to the decoy later.

© GERNANT MAGNIN

A trapped female Montagu's harrier.

© GERNANT MAGNIN

Trapped Levant sparrowhawk, also red-backed shrike food.

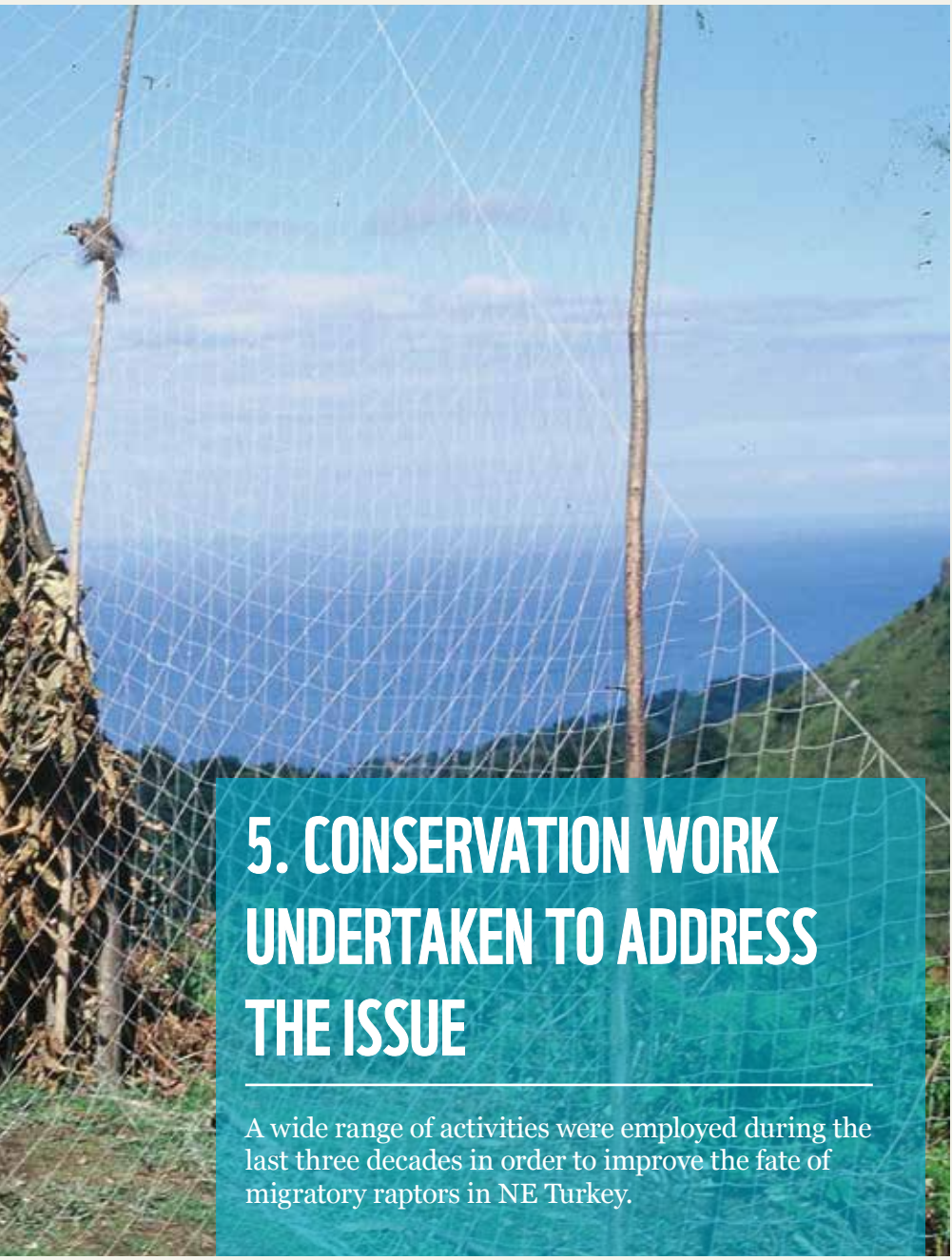
© GERNANT MAGNIN

Male sparrowhawk, here on its perch in a village but normally killed for food or released.

© OĞUZ KURDOĞLU

Trapped osprey (trapped in bag net), a rarity and thus displayed on a perch.

© OĞUZ KURDOĞLU



5. CONSERVATION WORK UNDERTAKEN TO ADDRESS THE ISSUE

A wide range of activities were employed during the last three decades in order to improve the fate of migratory raptors in NE Turkey.

5.1 Actions Undertaken by DHKD

During 1990, Society for Protection of Nature (DHKD) published and distributed a Turkish version of the 1989 ICBP report. The ongoing killing of raptors in north-east Turkey continued to receive international and national attention and it was agreed that a strategy would have to be agreed and action undertaken. Using the approach as outlined by Kurdoğlu (1988) as a starting point, DHKD agreed that it would:

- Not oppose the tradition of falconry in north-east Turkey, and thus not condemn the trapping of red-backed shrikes and sparrowhawks.
- Very decisively oppose the killing of raptors that are used to feed the decoy birds, as well as the trapping with bag nets.
- Begin collaboration with sparrowhawk trappers/owners.
- Emphasize the unethical and culturally unacceptable aspects of killing birds of prey.

GIVEN THE EXTENT OF THE TRADITION AND THE SCALE ON WHICH IT WAS PRACTISED, DHKD DECIDED IT WOULD BE SENSELESS TO OPPOSE THE ENTIRE PHENOMENON

It is important to realise that Turkey was already at the time a signatory to all relevant international conventions in this field, and that in fact all aspects of falconry in north-east Turkey were illegal. However, given the extent of the tradition and the scale on which it was practised, DHKD decided it would be senseless to oppose the entire phenomenon. In due course, DHKD came to formulate a strategy that included, awkwardly and uncomfortably for some, suggesting ways to legalise trapping and keeping of sparrowhawks and red-backed shrikes. This implied changing the status of two bird species in the Turkish hunting laws, and legalising an illegal method of trapping.

Starting in 1990, DHKD and its allies in local and central government circles started putting the issue on the political agenda, especially by publishing the Turkish version of the 1989 ICBP report. Articles in newspapers and items on TV, themselves the result of the publication of (DHKD) reports or stories, kept the issue 'alive', as did the fact that key individuals in relevant ministries (especially the Ministry of Forestry) agreed with the DHKD line of thinking. Numerous meetings with trappers and sparrowhawk owners took place over the years. The 1994 educational campaign (described below) triggered enormous momentum in this respect. During the

campaign, DHKD suggested to trappers that they should feed the decoy birds with boiled eggs instead of raptor meat. During the same year, the first Sparrowhawkers Society was established. To emphasize the immorality of the killing of raptors, local sympathisers started using phrases that included culturally charged words like 'saygı' (respect) and 'günah' (sin). This may appear pedantic in some societies, but referring to fundamental values and principles worked well in this case.

During the mid-1990s, the attention of DHKD focussed specifically on the use of 'bag nets' (cf. 4.2), an indiscriminate and often cruel way of trapping raptors. Sparrowhawk trappers/owners and the public turned against their use, which was largely abandoned in subsequent years.

DURING 19 SEPTEMBER - 2 OCTOBER 1994, DHKD CARRIED OUT THE LARGEST IN SITU EDUCATIONAL CAMPAIGN HITHERTO CARRIED OUT IN TURKEY

Not directly focussing on the falconry issue, but surely affecting the mentality and approach of local and regional decision makers, was the 'Eastern Black Sea Conservation Programme' of DHKD, mainly funded by WWF International, that commenced in 1993 and lasted for three years. This programme was broad in scope and addressed the conservation of old growth forest and forestry, and land use issues. The project coordinator (on a secondment from the Ministry of Forestry) is the second author of this report and was based within the offices of the Eastern Black Sea Forest Institute in Trabzon.

During 1992, DHKD made a simple five-minute documentary film with a handheld Hi-8 camera. It showed the trapping and keeping of sparrowhawks, interviewed sparrowhawk trappers/

owners, as well showing and making explicit the shadowy side of the practice. In spite of the somewhat inferior quality of the film it was shown on a few nationwide Turkish TV channels and numerous times on regional and local channels, and was thus seen by several million people; over the years it was also used maybe hundreds of times to inform people during meetings and in schools. VHS-duplicates of the film were sent to hunting clubs and Ministry of Forestry representatives, mainly in the region. An English version of the film was produced and sent to the relevant institutions and individuals in and outside Turkey (and narrowly failed to make it to the Oscar nominations). The film cost circa 2,000 Euro to make and distribute.

German Television station ZDF also visited in the early 1990s and made a professional documentary on Turkish falconry which was apparently only shown in Germany.

During 19 September - 2 October 1994, DHKD carried out the largest *in situ* educational campaign hitherto carried out in Turkey. After a formal launch in a high school in the regional capital town of Rize that was well covered by the press, all primary, secondary and high schools in the towns and villages between Çayeli and the Georgian border were visited. Three

Oğuz Kurdoğlu debating with sparrowhawk trappers/owners at tea houses in Çayell, and Fındıklı, 1994.

© GERNANT MAGNIN

separate teams (each with its own mini bus and driver, and consisting of volunteer teachers and university students from Istanbul, Ankara and Trabzon), visited a total of 125 schools armed with a tailor-made educational kit. Together they addressed just over 10,000 pupils and nearly 500 teachers, by means of 140 presentations.

DURING THE MID-1990S, THE ATTENTION OF DHKD FOCUSSED SPECIFICALLY ON THE USE OF 'BAG NETS' AN INDISCRIMINATE AND OFTEN CRUEL WAY OF TRAPPING RAPTORS

In terms of material specially designed for this campaign, it is worth mentioning a full-colour illustrated booklet for young kids of which 5,000 copies were printed, an inexpensive leaflet (5,000 copies) and a full-colour 8-page brochure (2,000 copies) for distribution amongst sparrowhawk trappers/owners, government representatives, and the general public. In addition to the school visits, meetings were organised at tea houses, hunting societies, police stations, and at the offices of governors, muhtars (village heads), imams (local religious leaders) etc.

Crucially, all educational material had been approved by the head office of the Ministry of Education, and permission to carry out the campaign was granted by regional and local governors.

This educational campaign cost 50,000 Dutch Guilders (ca. € 34,000 at 2016 rates) to execute and was financed by the Dutch BirdLife partner VBN.

© GERNANT MAGNIN

© GERNANT MAGNIN

5.2. Actions Undertaken by the Government

All practices described above were strictly illegal under the provisions of the No. 3167 Turkish Hunting Law that originated from 1937. But the Forestry Department of the Ministry of Agriculture, Forestry and Rural Affairs, then responsible for the annual detailed hunting regulations, had tried, since 1987, to find ways to legally allow some aspects of the falconry. This was, however, only partially possible within the framework set by the No. 3167 Hunting Law, and thus led to contradictory pieces of legislation and an impossible basis for realistic implementation. Governmental interest in solving the issues surrounding falconry was raised after the publicity in the late 1980s, and especially the Ministry of Forestry and the Gendarmerie would now increasingly enforce the existing legislation during the 1990s; the Ministry of Forestry also took an active role in, and often led or called for, discussions with trappers and sparrowhawk owners. For example, in 1998 the district office of the Ministry of Forestry in Arhavi (where the second author worked at the time), based on successful first trials in 1994, undertook a larger pilot scheme to certify 180 sparrowhawk trappers/owners in the Arhavi/Hopa area.

Sparrowhawk owners during the mandatory course.

Then, in 2003, the new No. 4915 Hunting Law was approved in parliament. During 2004, detailed regulations were added in collaboration with sparrowhawk owners and conservationists, and the result was that it would be:

- Legal to trap with a net, and possess, a maximum of two sparrowhawks in total, during 29 August – 15 November, and birds would have to be released by 25 November at the latest after a health check by representatives of the relevant Ministry.
- Legal to trap, and use as decoy, a maximum of two red-backed shrikes, and it was stipulated that the birds have to be released by 18 November at the latest.
- Necessary to obtain, in addition to the standard hunting licence, a certificate to trap or own a maximum of two sparrowhawks. The pricing of the certificate is complicated, with an initial 5 year 'registration' fee amounting to (all 2015 prices, when 100TL was 30€) 300TL, and in addition there is a 5 yearly, 150TL 'administration' cost. The regulations also allowed for another kind of certificate, namely one for falconers to obtain 'apprentice' status, but the exact status and conditions for this were rather unclear and apparently no or very few people obtain this certificate.
- Mandatory to follow a minimum 6-hours course and take an examination before the sparrowhawk certificate is issued. This educational component was piloted in Arhavi and Hopa starting 2002, and region wide it commenced in 2005. This course would be in addition to the mandatory 32 hours general hunting course which is a prerequisite for starting the sparrowhawk course; membership of one of the sparrowhawkers societies is also an obligation and three references of other members are required before the certificate is issued. The standard fine for possessing or hunting sparrowhawk without the certificate was 7,500TL as of November 2015.
- Necessary to obtain yet another permit that identifies at which locations quail may be hunted with the sparrowhawks.
- Possible to keep at most one sparrowhawk all year round, but this bird would need to be registered and ringed by representatives of the responsible ministry.

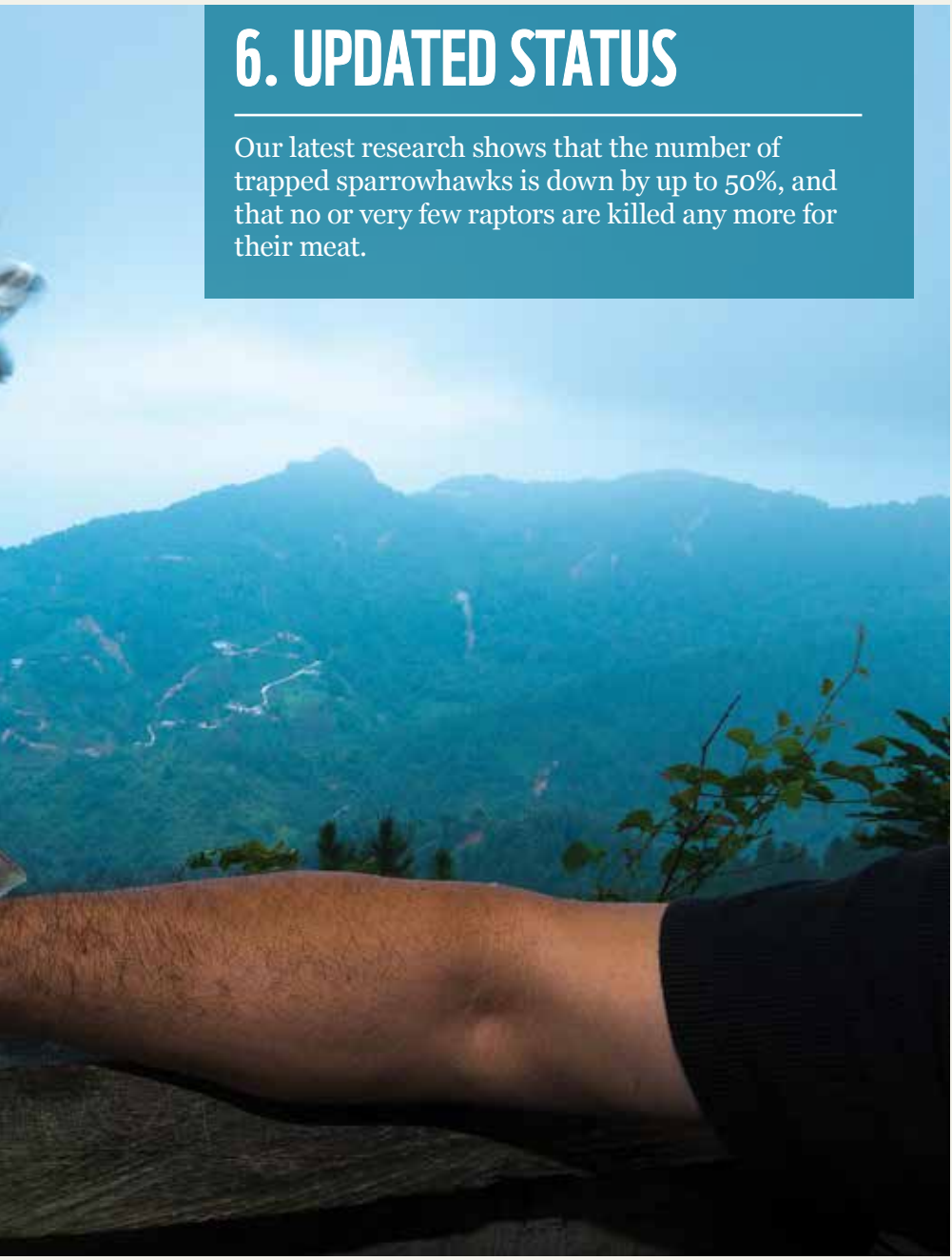
It should also be noted that:

- The exact dates mentioned above regarding the release of sparrowhawks etc. were valid for 2015. Updates are issued annually.
- The minimum age for obtaining a certificate is 18.
- No data are available, but it is said that, from 2005, responsible officials stepped up enforcement of the new Hunting Law.

One of the first certificates issued during a local trial.

6. UPDATED STATUS

Our latest research shows that the number of trapped sparrowhawks is down by up to 50%, and that no or very few raptors are killed any more for their meat.



6.1. Why an Update (Methodology)

The two authors are either based in or close to the area (Kurdoğlu), or have been returning to the area annually (Magnin), and have been following developments regarding falconry from a distance ever since 1987. Kurdoğlu (2002) estimated that in some parts of Arhavi in 2000, the number of sparrowhawk owners had gone down by 25%. Anecdotal information received by us during the entire period indicated that the killing of raptors was declining. During 2013-2014, Kurdoğlu undertook a survey by questioning 224 trappers and sparrowhawk owners (Kurdoğlu in prep). During early 2015, it was decided that a targeted field survey would be needed to definitely establish the facts.

This section presents the actual findings of the 2015 field survey, and checks these against the preliminary outcome of the 2013-2014 survey by Kurdoğlu and our observations and impressions from the last few years.

During 10-14 September 2015, the authors (accompanied by Lars Soerink [BirdLife Netherlands], Ahmet Emre Kütükçü [WWF-Turkey], and Eylül Dizdaroğlu) re-visited several areas as known from 1987, especially the Opurmole Hills near Hopa, and the İsina Hill near Arhavi. We also interviewed tens of people currently or formerly involved in falconry or the implementation of the hunting law; and at one stage we spent nine hours with a trapper in his hide. As in 1987, we visited all the villages in the area, and counted the number of sparrowhawks present on perches; we scanned hunting shops for the presence of paraphernalia such as bells and red-backed shrikes traps. The duration of this study was hardly comparable with the 1987 effort, but one has to bear in mind that the core information (such as the area and methods) did not need a re-assessment, and the prime localities were known.

On 10 September and 14 September we spent several hours in the respective tea houses that serve exclusively as the gathering places of the members of the Pazar and Ardeşen sparrowhawkers societies. There were at least 25 sparrowhawks in the former, and 19 birds in the latter; all owners were happy to talk and explain.

WE ESTIMATE THAT BOTH NUMBERS OF TRAPPERS AND TRAPPING ACTIVITY/ INTENSITY HAVE DECREASED BY UP TO 50% SINCE 1987

6.2. Findings and Summarised Conservation Impact

I) The number of trappers is down, and hence trapping activity has decreased.

The number of trappers has decreased. In Arhavi, during 1987, we established that there were 741 trappers active in the Arhavi district (Kurdoğlu 1988); during 2014 this number had fallen to 450 trappers (Kurdoğlu in prep). This presumption is confirmed by the number of active hides discovered during 2015. For example, during 1987 the İsina Hill near Arhavi had 25 hides (15 of which were operated by 15 different trappers on several dates during 1987) and the Opurmole Hill near Hopa had 13 hides (nine of which were used by trappers at one time). During 2015, on similar dates and during seemingly favourable weather conditions, we found eight hides at the İsina hill (four of which were operated by four different trappers), and three hides at the Opurmole Hill (one of which was operated by a trapper, and reliable information indicates that there are basically only two trappers still active here). We researched and inquired extensively whether this was the result of better or new preferred trapping localities, or that we were present at the wrong time, but we are confident that none of these was the case. Over 70% of the trappers interviewed during

Red-backed shrike with hard-boiled egg, Arhavi 2015.

© GERNANT MAGNIN

2013-2014 thought that their number was dwindling. Based on our observations and interviews during 2015, we estimate that both numbers of trappers and trapping activity/intensity have decreased by up to 50% since 1987.

ON A SAMPLE OF 16 PHOTOGRAPHS TAKEN HERE IN 1987, WITH 16 DIFFERENT TRAPPERS, 15 WERE CARRYING A GUN. OF THE 11 TRAPPERS ENCOUNTERED DURING 2015, NONE HAD A GUN

A smaller number of active trappers, and less trapping activity, implies that a smaller number of birds is caught. The number of birds in the streets is certainly less compared to 1987. Large concentrations of birds were still found at the designated localities, at the tea houses where the members of the sparrowhawkers societies congregate. These societies did not exist in 1987 hence comparing these figures is complicated. We estimate that the actual number of sparrowhawks owned by people has gone down by a maximum of 50% since 1987.

Whilst acknowledging all uncertainties, we estimate that during 2015 some 7,500 sparrowhawks were trapped. When roughly applying the 1987 ratios (but excluding the killing of sparrowhawks for red-backed shrike food), of this number 4,000 birds would have been released right away; of the 3,500 birds kept as pets or used for hunting quail some 500 would have died whilst in captivity as a result of the crop disease. The remaining 3,000 birds would have been released on the required date or earlier. Whether these birds can survive the winter and successfully migrate back to their breeding grounds the next spring only future research will be able to reveal (cf. 4.8).

The possibility of keeping a sparrowhawk during the winter seems rarely to be used. During 2015 we came across two birds that were said to be kept all year round. We estimate that in the whole Arhavi area no more than 10 birds are kept all year round.

In line with the reduction of sparrowhawk trapping activity, we assume that the number of red-backed shrikes used as decoys has also decreased by up to 50%.

II) Shooting and trapping of raptors has sharply declined and may no longer happen.

During our 5 full days in the field in 2015, we heard a total of 2 hunting gun shots. This is in sharp contrast with the situation in 1987 when shooting would be constant and frequent in the entire area, and even intense in hotspots such as the İsina Hill in Arhavi; also, trappers' hides would be littered with cartridges. During 2015, we spent the best part of two full days (including

a Saturday) at or around the İsina, heard no shots and found 12 empty cartridges in total. The 1987 notes that state exactly how many trappers carried guns were lost, but from memory it is estimated at 90%. On a sample of 16 photographs taken here in 1987, with 16 different trappers, 15 were carrying a gun. Of the 11 trappers encountered during 2015, none had a gun.

THE TRAPPERS ARE NOW PROUD THAT THEY ARE TRUE TRAPPERS, AND NOT 'SHOOTERS'; THERE WAS NO SUCH DISTINCTION UNTIL THE MID-1990S

During 1987, throughout the region, torn-off raptor wings or carcasses of up to ten birds could be found near or around hides, testifying to the fate of overflying raptors. Although during 2015 we saw relatively few active trappers (11) and checked only a total of 15 hides, we found no remains of raptors, anywhere. We saw several red-backed shrikes with small boxes tied to their perches, stuffed with either hard-boiled egg, or minced meat.

Our presumption that the shooting or trapping of raptors has decreased considerably was confirmed by all trappers, sparrowhawk owners and others we talked to (a total of circa 60 individuals) who generally stated that 'in the old days' as a result of 'ignorance' and need for meat to keep the decoy alive, raptors including sparrowhawks were widely killed.

III) Many of the trappers and sparrowhawk owners have the required licence, and the sparrowhawk owners have become a much tighter community.

We have the impression that a majority of the trappers and sparrowhawk owners had obtained a valid licence to trap and keep

© AYKUT İNCE/OGM

sparrowhawks. All of these had thus also gone through the 6 hour, mandatory sparrowhawk course. Of 224 sparrowhawk trappers/ owners interviewed during 2013-2014, 70% said they had the required licence (Kurdoğlu in prep). By the end of 2015, a total of some 1600 certificates had been issued by the authorities which would confirm that, allowing for a number of individuals who own two birds, in the region of 3000 birds are held in total. In addition, the thriving sparrowhawkers societies imply there is an apparently healthy dose of peer pressure and strong sense of fraternity amongst trappers and sparrowhawk owners. The trappers are now proud that they are true trappers, and not 'shooters'; there was no such distinction until the mid-1990s. The fact that the former generation of trappers even killed unfit sparrowhawks and fed them to the red-backed shrikes is not denied, but seems unimaginable to most today. A good, healthy sparrowhawk is paramount, and the birds are treated with great respect.

IV) The age composition of sparrowhawk trappers and owners has changed.

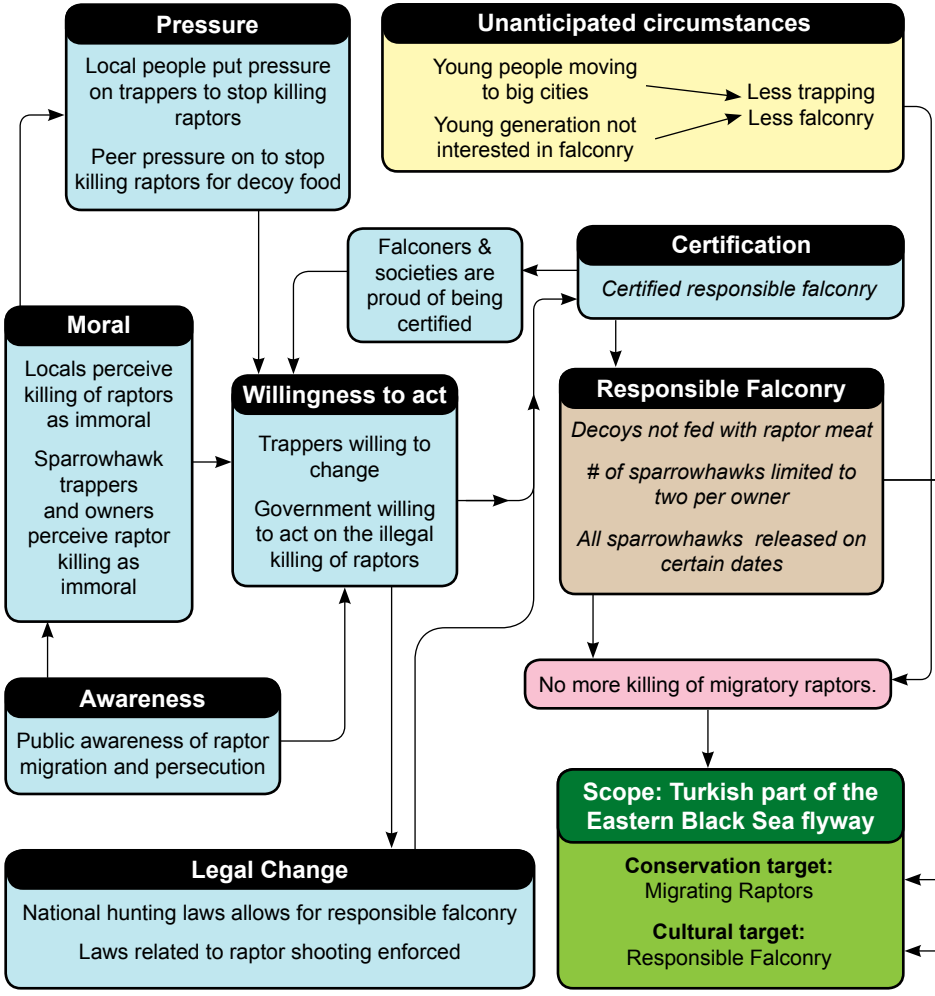
During 1987 it was estimated that trappers were between 17-50 years of age, and the group of sparrowhawk owners covered an even wider span. During 2015, the youngest trapper we saw was over 40 years of age, and it was the same for the sparrowhawk owners. Many sparrowhawk trappers/owners we talked to complain that their sons are hardly or not interested in their hobby, and are not taking part. The new law sets a minimum age of 18 for trapping or keeping a sparrowhawk.

Summarising, in terms of relevant conservation impact, we are confident that the 2015 field survey confirms that in recent years:

1. **The number of sparrowhawk trappers and sparrowhawk owners has decreased by up to 50%;**
2. **The number of trapped red-backed shrikes and sparrowhawks is down by up to 50%;**
3. **No or very few sparrowhawks or other raptors are being killed any more to serve as food for the decoys. It was estimated that this amounted to up to 18,750 raptors per year in 1987.**

7. ANALYSIS: WHAT DROVE THE CHANGES

Many factors contributed to the conservation success regarding responsible falconry in north-east Turkey. The *theory of change* diagram below shows the relationship between these factors.



Until the early 1990s, falconry practices in north-east Turkey included the annual killing of up to 18,750 raptors. The centuries-old tradition (unchanged in most details, except the addition of shotguns in recent decades) was widespread, largely unknown by a wider audience, and accepted by local people. Existing laws explicitly forbade the use of nets, decoys and the catching or shooting of any of the species involved, but these laws were never enforced.

From the start, conservation initiatives took the line that the massacre of raptors could only be stopped by working towards a responsible form of falconry.

Extensive awareness-raising activities were carried out during the early 1990s, exposing the general public and government, both Turkey-wide and locally, to the fact that thousands of raptors were slaughtered. This eventually led to widespread consensus that falconry in that form was unacceptable and immoral.

Subsequent constructive dialogue between government, sparrowhawk trappers/owners and conservationists led to all sides being willing to make concessions.

All sides agreed that the then effective Hunting Law (dating from 1937) was too rigid and would not comfortably allow any responsible form of falconry. Legal limitations were lifted with the coming into force of the new Hunting Law in 2003, and opportunities to facilitate a more responsible form of falconry

were detailed in subsequent formal regulations that were issued in 2004.

ALL TOLD, THE NUMBER OF RAPTORS INTENTIONALLY KILLED STARTED TO GO DOWN IN THE LATE 1990S AND DURING 2015 IT WAS FOUND THAT IT HAD ALMOST COME TO A COMPLETE STOP

The sparrowhawk trappers/owners, meanwhile, united themselves in societies with stronger moral codes as well as improved practices. A comfortable majority of sparrowhawk trappers/owners obtained the required certificate. The government agency (the Ministry of Forest and Water as called today) for its part stepped up implementation. The minimum age for obtaining the certificate was set at 18, which implied that it became problematic for trappers to take their sons along during trapping, or for boys to parade the village streets with a sparrowhawk on their arm.

All told, the number of raptors intentionally killed started to go down in the late 1990s and during 2015 it was found that it had almost come to a complete stop.

Other factors no doubt played a role, such as the fact that many young people moved to the cities for work and study, and fewer young men developed an interest in falconry. In 18 European countries, the number of hunters dropped by nearly 20% between the early 1990s and 2012 (Massei, 2014), and the trend is likely to be similar in Turkey. Road building and strongly increased car ownership meant that trapping changed from two to three day trips to one day trips, implying that fresh meat for the decoy bird could be taken along and thus there would be no need to kill a raptor daily.

© AYKUT İNCE/OGM

8. LESSONS LEARNED

This report gives sufficient evidence that a serious conservation problem involving the deliberate killing of up to 18,750 raptors every year has successfully been resolved. We identified four main strategic lessons that may be relevant to conservationists elsewhere, and four lessons of a more practical nature that also seem important.

THIS REPORT GIVES SUFFICIENT EVIDENCE THAT A SERIOUS CONSERVATION PROBLEM INVOLVING THE DELIBERATE KILLING OF UP TO 18,750 RAPTORS EVERY YEAR HAS SUCCESSFULLY BEEN RESOLVED

Strategic lessons:

1. **Identify and reconnect to the relevant fundamental moral attribute that went missing**. For many centuries, migrating raptors were trapped and killed in the area but in such numbers and under such circumstances that the practice seemed sustainable. Society as a whole, however, failed to respond to the increase in the number of hunters and their amount of free time, the introduction of cheap shotguns and the lack of discipline of quite a few over-excited gun users. People were also not aware of the global implications of the tradition, in the light of dwindling numbers of many raptor species. During the awareness raising campaigns we firmly emphasized the immorality of the habit of killing raptors in order to feed the decoy birds. The reconnecting with fundamental moral attributes was achieved much more quickly and more thoroughly than we had ever imagined, and we feel it was this single factor that fuelled and propelled the debate and the string of developments that ultimately led to cessation of the large scale raptor killing.

2. **It is essential to involve the main stakeholders.** The immorality of killing raptors had quickly become the undeniable and overwhelming reason to reform the falconry practice, and sparrowhawk trappers/owners themselves were instrumental in exploring and suggesting various models and different ways to achieve this.

3. **It is essential to involve the government.** An ongoing and mostly constructive close collaboration with government representatives is a precondition for legal and lasting changes. It also helps when there is a large

constituency to press the government for change.

4. **Uncomfortable decisions may have to be made**. DHKD, from day one, decided it would not oppose falconry as whole. It even suggested measures that may appear contrary to conservationists' instincts (and it was thus sometimes heavily criticised for this by partner conservation NGOs), such as partially lifting the protected status of sparrowhawks and red-backed shrikes.

Practical lessons:

5. **Change takes time**. The chain of events described in this report started in 1987 and thus to come to the present, much improved state, has taken the best part of three decades.

6. **Stick to your principles and stick to the project**. DHKD (and partners) have followed this agenda for most of this period and never changed course. This is sometimes difficult considering the lure of emerging, more easily fundable and hence often changing new conservation priorities and approaches.

7. **Act locally and act from within**. Apart from running a number of local projects, with mainly local staff, DHKD benefitted from the fact that, during the last 28 years, the second author was working for the Ministry of Forestry for 15 years and for 13 years for the Forestry Departments of both Artvin and Trabzon Universities.

8. **Cost-effective conservation is possible.** Successful strategies don't necessarily need big investments. The total cost of all NGO actions described in this report, over the course of 28 years (including the running of the DHKD office and all related work), probably did not exceed € 100,000.

In the years to come this positive development may be reversed for whatever reason. It may also be that the improvements have not yet reached all remote corners of this large area and that there are still places where people do disrespect the law. Therefore, it is essential to continue following developments.

9. LITERATURE

A history of research on the Eastern Black Sea migration route. Downloaded on 18/11/2015 from http://www.batumiraptorcount.org/research/history-research-eastern-black-sea-migration-route.

Abuladze, A. 2013. Materials towards a Fauna of Georgia, Issue VI. Downloaded from https://www.academia.edu/7755158/Birds_of_Prey_of_Georgia

BirdLife International (2015) Species factsheet: Coturnix coturnix. Downloaded from http://www.birdlife.org on 18/11/2015.

Bijlsma, R.G. 1987. Bottleneck areas for migratory birds in the Mediterranean region. ICBP Study Report No. 18, Cambridge.

Jansen, J. 2013. Assessment of the shooting of migrating raptors in the Batumi Bottleneck. Evolutionary Ecology Group, Department of Biology, University of Antwerp, Belgium.

Kumerloeve, H. 1966. Beizjagd in der heutigen Türkei *(Falconry in modern Turkey)*. Dt Falkenorden 1966: 41-43.

Kurdoğlu, O. 1988. Doğu Karadeniz Bölgesi'nde Gündüz Yırtıcı Kuşları ve Özellikle Doğu Atmacası (*Accipiter nisus*) ile Yapılan Avcılık *(Hunting with raptors and especially Sparrowhawks in the north-east Black Sea region)*. Master Thesis, Istanbul University, Institute of Natural and Applied Sciences, Istanbul, Turkey.

Kurdoğlu, O. 2002. Değişen Dünya Değişmeyen Gelenek: Atmacacılık, Yasal Durum, Sorunlar ve Çözüm Önerileri *(Unchanged traditions in a changing world: legal status, problems and possible solutions of falconry)*. National Black Sea Forestry Congress, Congress Papers Book, Volume 22, s.643-652, Artvin, Turkey.

Kurdoğlu, O, (in prep). A socio-economic study and re-evaluation of falconry practices in north-east Turkey. Karadeniz Technical University, Turkey.

Maanen, E. van, Goradze, I., Gavashelishvili, A., Goradze, R., 2001. Trapping and hunting of migratory raptors in western Georgia. Bird Conservation International 11, 77-92.

Maanen, E. van, Gavashelishvili, A., Goradze, I., Goradze, R. 2001. Ecologie, aantallen en bescherming van roofvogels in Georgië *(Ecology, numbers and conservation of raptors in Georgia)*. De Takkeling 9(2):118-134. (Journal of the Dutch Working Group on Birds of Prey).

Magnin, G. 1989. Falconry and hunting in Turkey during 1987. ICBP Study Report No. 34. Cambridge.

Magnin, G. 1991. Hunting and persecution of migratory birds in the Mediterranean region. Pp 63-75 in: Salathe, T. (Ed.) Conserving Migratory Birds. ICBP Technical Publication 12. Cambridge.

Magnin, G. & Yarar, M. 1997. Important Bird Areas in Turkey. The Society for the Protection of the Nature (Dogal Hayati Koruma Derneği), Turkey.

Massei, G., Kindberg, J., Licoppe, A., Gačić, D., Šprem, N., Kamler, J., Baubet, E., Hohmann, U., Monaco, A., Ozoliņš, J., Cellina, S., Podgórski, T., Fonseca, C., Markov, N., Pokorny, B., Rosell, C., Náhlik, A., 2014. Wild boar populations up, numbers of hunters down? A review of trends and implications for Europe. Pest Manag Sci. 2015 Apr;71(4):492-500. doi: 10.1002/ps.3965.

Meyburg, B.U., 2005. Zug und Verfolgung der Greifvögel in der südlichen Türkei *(Migration and persecution of raptors in southern Turkey)*. In Orn. Mitt., pp. 12-16.

McCulloch, M.N., Tucker, O.M., Baillie, S.R. 1992. The hunting of migratory birds in Europe: a ringing recovery analysis. Ibis 134 suppl. I: 55-65.

Turkish Falconry. 2013. Hunting Quail with a Sparrow Hawk. Available at: https://www.youtube.com/watch?v=jpqWckbkLYY (Accessed: 18 November 2015).

Vansteelant, W.M.G., Verhelst, B., Shamoun-Baranes, J., Bouten, W., van Loon, E.E., Bildstein, K.L. 2014. Effect of wind, thermal convection, and variation in flight strategies on the daily rhythm and flight paths of migrating raptors at

Georgia's Black Sea coast. FNWI: Institute for Biodiversity and Ecosystem Dynamics (IBED), FNWI: Institute for Biodiversity and Ecosystem Dynamics (IBED). Downloaded from http://hdl.handle.net/11245/2.136183

Vansteelant, W.M.G., 2016. From thermal to flyway: how weather shapes the soaring migration of European Honey Buzzards *Pernis apivorus* at multiple scales. PhD dissertation, Faculty of Science, Amsterdam University. Downloaded from http://hdl.handle.net/11245/1.507795

Verhelst B., Jansen, J., Vansteelant, W. 2011. South West Georgia: an important bottleneck for raptor migration during autumn. Ardea 99:137-146. Also accessible from http://www.batumiraptorcount.org/sites/default/files/imce/docs/verhelstetal-2011-georgia_bottleneck_raptormigration_autumn-ardea.pdf

Woldhek, S. 1980. Bird Killing in the Mediterranean. European Committee for the Prevention of Mass Destruction of Migratory Birds, Zeist, Netherlands.

FALCONARY IN NE TURKEY

100% RECYCLED

15,000

In 1987, approximately 15,000 sparrowhawks were trapped.

50%

The number of sparrowhawk trappers and sparrowhawk owners have decreased by up to 50% since 1987.

0

None or very few raptors are killed any more to serve as food for the decoys after nearly three decades of conservation action.

34,000

Total amount of Euros spent for the education campaign in 1994.

Why we are here:
To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.wwf.org.tr