

# A summary of intentional poisoning of Peregrine Falcons in Switzerland during the last decade

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*Received: April 05, 2017 – Revised: August 14, 2018 – Accepted: September 26, 2018*

This is a contribution submitted to the Proceedings of the World Conference on the Peregrine Falcon in Budapest in September 2017.



Inderwildi, E., Müller, W., Ayé, R. & Sinniger, M. 2018. A summary of intentional poisoning of Peregrine Falcons in Switzerland during the last decade. – *Ornis Hungarica* 26(2): 164–170. DOI: 10.1515/orhu-2018-0025

**Abstract** In May 2011, a webcam in Zurich, Switzerland, registered the sudden death of a Peregrine Falcon. Analyses revealed that poison had been applied to the nape feathers of the pigeon captured by the bird. This case really raised the awareness of Peregrine Falcon poisoning by pigeon fanciers in Switzerland. BirdLife Switzerland, with the help of numerous partners, started researches on the subject that pigeon fanciers began a “war” against Peregrine Falcons and other raptors. Between 2006 and 2017, BirdLife Switzerland listed 7 cases of proven intentional poisonings of birds of prey where analyses confirmed the use of poison; and 19 suspected cases with the presence of dead pigeons and birds of prey simultaneously or other suspicious deaths in Switzerland. Three decoy pigeons with poison on the neck could be secured before they were captured by the target species. Two pigeon fanciers who used poisoned pigeons were convicted in 2016 and 2017. Although the numbers of proven and suspected cases are still low, we believe that the phenomenon may be much more widespread. We think that the poisoning may have a negative effect on the population of the Peregrine Falcon in Switzerland.

Keywords: intentional killing, persecution, poaching, pigeon fanciers

**Összefoglalás** 2011 májusában egy zürichi (Svájc) webkamera rögzítette egy vándorsólyom hirtelen elhullását. Az elemzések kimutatták, hogy a sólyom által megfogott galamb tarkótollait méreggel kezelték. Ez az eset országsszerte felhívta a figyelmet a vándorsólymok galambászok általi mérgezésére. A BirdLife svájci szervezete együttműködők bevonásával kutatásokba kezdett a galambászok által a ragadozó madarak ellen indított “háború” kapcsán. 2006 és 2017 között hét, bizonyítottan mérgezéses esetet regisztráltak, és további 19 esetben feltételezhető a mérleg használata, mivel mind elhullott galambokat és ragadozókat is rögzítettek Svájcban. Három csaliként alkalmazandó galambot sikerült a ragadozók előtt elfogni. Két galambászt mérgezős vétségében elítéltek 2016-ban és 2017-ben. Annak ellenére, hogy a bizonyított és feltételezett mérgezések száma alacsony, úgy hisszük, hogy ezek az esetek gyakoribbá válhatnak. Meglátásunk szerint a mérgezések kártékony hatással lehetnek a svájci vándorsólyom populációra.

Kulcsszavak: szándékos mérgezés, orvvadászat, törvénykezés, galambászok

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## Introduction

In May 2011, a webcam in Zurich, Switzerland, registered the sudden death of a Peregrine Falcon *Falco peregrinus* at its nesting box. The bird died while plucking a pigeon. Analyses revealed that a poison had been applied to the nape feathers of the pigeon. The three young were brought to a rehabilitation centre, reared to independence and released afterwards. The male survived but was found poisoned three years later at another nesting site in Zurich.

This death registered by a webcam was the case that really raised the awareness of Peregrine Falcon poisoning by pigeon fanciers in Switzerland. Thus, BirdLife Switzerland, with numerous partners initiated a Peregrine group dealing with the intentional poisoning. The group started researches on the subject and gathered information on suspicious cases also from the past years. The first publication described the phenomenon of the intentional poisoning of Peregrine Falcons in Switzerland (Vogler *et al.* 2015), but in the last years new cases sadly had to be added to the list. In the following, we present the conflict between pigeon fanciers and birds of prey, the data on poisoning that could be gathered from 2006 to 2017, the cases that have come to justice, the activities of the Peregrine group to counter the poisoning and lastly, we place the poisoning in relation to the status of the Peregrine Falcon population in Switzerland in recent years.

## The conflict between pigeon fanciers and birds of prey

Pigeons count among the prey items of Peregrine Falcons and other raptors and the birds do not differentiate between wild pigeons and domestic pigeons. Domestic pigeons may even be easier targets because they are less adapted to the life in the wild and may have a lower ability to escape predators.

There are at least two different groups of pigeon fanciers that are concerned by the predation of their pigeons by Peregrine Falcons: the keepers of homing pigeons that are released at a remote place and must travel long distances to their home loft (Riviere 1923) and the keepers of high flyers or tippler pigeons. This second group of pigeons is trained to fly in the air above the loft and to remain airborne in the same place for long hours (Gessaman *et al.* 1991). High flyers and tipplers are very predictable prey items since they are flying in flocks regularly at the same place for several hours. Even if less predictable, homing pigeons are also regularly captured by Peregrine Falcons and other birds of prey. In the case of the high flyers and tippler pigeons, the pigeon fanciers often observe the raptor attacks. In the case of homing pigeons, when the pigeons do not return home, the causes may be multiple and an attack by a bird of prey can generally not be proven.

For pigeon fanciers, it is of course a loss, if their pigeons are injured or killed by birds of prey. They are flying races with them and pigeons that win races and their offspring are worth several thousand dollars (up to \$5,000). There may also be high stakes in some races and a Peregrine Falcon attack will interrupt the flight of high flyers or tippler pigeons even without the loss of a pigeon. In such a case, the pigeon fancier will lose his chances to win

the race. Some pigeon fanciers give recommendations to deal with Hawks and Falcons: according to Sewall (2017), the golden rules when dealing with raptors are to be flexible and to be unpredictable. It means not to train the pigeons every day at the same hour at the same place in order to get the raptors to move to other hunting grounds. Other pigeon fanciers choose illegal methods: the poisoning or shooting of their enemies. Illegal killing of Peregrine Falcons, especially by pigeon fanciers is one of the known threats for the species in a lot of countries (Olsen & Olsen 1980, Haas 1995, Monneret 2000).

The Peregrine Group, with the help of a Serbian falcon specialist, found out that pigeon keepers, native from South-eastern Europe started a “war” against Peregrine Falcons and other birds of prey in Switzerland and in other countries. They had a blog in Serbian where they explained how to kill the Peregrine Falcons with the help of poisoned pigeons released outside and prevented from returning to the loft. On the blog, they also wrote about numerous successful attempts to kill Peregrine Falcons. A pigeon fancier from the Balkans, resident in Switzerland, who regularly wrote on this blog under a nickname was discovered and controlled by the police. But there was too little evidence for prosecution.

As the following data shows, the problem of poisoning of Peregrine Falcons and other raptors exists in Switzerland and it is mainly, if not entirely due to pigeon fanciers. They are the group exhibiting the greatest conflict with these birds.

## Data on poisoning

Between 2006 and 2017, the Peregrine Group listed 7 cases of proven intentional poisoning of birds of prey (5 Peregrine Falcons, 1 Northern Goshawk *Accipiter gentilis*, 1 indeterminate bird of prey) were analyses confirmed the use of poison. Three living decoy pigeons with poison on the neck could be secured before they were captured by the target species.

In 19 cases, 15 Peregrine Falcons, 2 Eurasian Sparrowhawks (*Accipiter nisus*), 2 Eurasian Buzzards (*Buteo buteo*), the use of poison was not proven, but the deaths are suspicious. In four cases, the raptors were found together with a dead pigeon, in one additional case, the raptor had a pigeon wing feather in the throat. In the other cases, the dead raptors were found at their feeding or breeding places without a visible injury. In three cases the male and female were found dead simultaneously. Since the rising of the awareness through the images taken by the webcam at the breeding site in 2011, analyses are normally made in all suspicious cases, if the carcasses are fresh enough. In cases before 2011, analyses to detect a poison were not usually made. *Table 1* summarizes the cases of sure and suspected intentional poisoning of birds of prey in Switzerland. We do not give indications about the location of the cases because we do not want to give the pigeon fanciers too much clues were they are mainly under control and where it is less the case.

While the numbers of proven and suspected cases are still low, we suspect that the phenomenon may be much more widespread. The detection probability of the poisoned Peregrine Falcons is probably very low.

Table 1. Cases of certain and suspected intentional poisoning of birds of prey in Switzerland from 2006 to 2017

1. táblázat A bizonyított és feltételezett ragadozó madár mérgezések Svájcban 2006 és 2017 között

Year	Dead raptor species	Poison detected	Presence of pigeon	Comments
2017	None	Carbofuran	Yes	Decoy pigeon captured alive
2017	None	Carbofuran	Yes	Decoy pigeon captured alive
2017	<i>Falco peregrinus</i>	–	Lot of pigeon remains but not entire pigeon	Suspect death of Peregrine on its feeding place. Carcass too old to detect poison
2016	None	Carbofuran	Yes	Decoy pigeon captured alive
2016	Unknown	Carbofuran	Yes	Feeding place with some pigeon feathers with poison. Carcasses were removed
2016	<i>Falco peregrinus</i>	–	Yes	Carcasses too old to detect poison
2015	<i>Accipiter gentilis</i>	Furadan	Yes	
2015	<i>Falco peregrinus</i>	Formetan/ Carbofuran	Yes	
2015	<i>Falco peregrinus</i>	Carbofuran	Yes	
2015	<i>Falco peregrinus</i>	Carbofuran	Yes	
2015	<i>Accipiter nisus</i>	–	Yes	Carcasses too old to detect poison
2015	<i>Accipiter nisus</i>	–	–	Carcass not secured
2014	<i>Falco peregrinus</i>	Methomyl	Yes	
2014	<i>Falco peregrinus</i>	–	–	Suspect death at the breeding place. Carcass too old to detect poison
2014	<i>Falco peregrinus</i>	–	–	Blog post that said a peregrine was intentionally killed
2014	<i>Falco peregrinus</i>	–	–	Suspect death at the breeding place. Carcass too old to detect poison
2014	<i>Falco peregrinus</i>	–	–	Suspect death at the breeding place. Carcass too old to detect poison
2011	<i>Falco peregrinus</i>	Methomyl	Yes	Registered by webcam
2010	<i>Falco peregrinus</i>	–	–	Suspect death of Peregrine on its feeding place. Carcass too old to detect poison
2010	<i>Falco peregrinus</i>	–	–	Suspect death at the breeding place. Carcass too old to detect poison
2009	<i>Falco peregrinus</i>	–	Yes	At the breeding place. No analyses made
2009	<i>Falco peregrinus</i>	–	Yes	At the breeding place. No analyses made
2009	<i>Falco peregrinus</i>	–	–	Suspect death. Carcass too old to detect poison
2009	<i>Falco peregrinus</i>	–	–	Suspect death. Carcass too old to detect poison

Year	Dead raptor species	Poison detected	Presence of pigeon	Comments
2009	<i>Buteo buteo</i>	–	With a pigeon wing feather in the throat	Suspect death. No analyses made
2008	<i>Buteo buteo</i>	–	–	Suspect death. Carcass too old to detect poison
2008	<i>Falco peregrinus</i>	–	–	Suspect death at the breeding place. Carcass too old to detect poison
2007	<i>Falco peregrinus</i>	–	–	Suspect death. No analyses made
2006	<i>Falco peregrinus</i>	–	–	Nest abandoned by adults, one nestling died later with symptoms of poisoning, but no analyses made

## Cases that have come to justice

In some regions, Police are actively involved in collecting evidence and in persecuting subjects that poison raptors or try to do so. Thanks to this help, two pigeon fanciers who used poisoned pigeons were convicted in 2016 and 2017. The first pigeon fancier succeeded in killing in 2015 a Northern Goshawk with a decoy pigeon. The dead birds were found in the vicinity of the pigeon loft and the police was called. The poison used could be found in the loft. The pigeon fancier admitted the crime and was condemned to a fine of 4,000 CHF (around \$4,000) and a conditional prison sentence of 11 months. He also had to cover the costs of the court of around 10,000 CHF. Before the trial, he was in jail for investigative custody for 5 weeks.

In the second case, a pigeon with coloured feathers and poison on its nape was secured by the police on a loft. The poison used was not found in the loft and the pigeon fancier did not admit the crime. But another illegal poison was found in the loft. This type of poison was used between 2011 and 2014 for several cases of poisoning of Peregrine Falcons in Switzerland. The fact that the pigeon tried to get back to this loft is a strong indication that it belongs to this loft. Accordingly, the court of first instance, as well as the cantonal court (second instance) decided that the pigeon fancier was guilty and condemned him to a fine of 1,500 CHF and a conditional prison sentence of 15 months. He was also condemned to cover the costs of the court of more than 20,000 CHF. Before the trial, he was in jail for investigative custody for 4 weeks. At the time of writing, it is as yet unknown, whether the pigeon fancier will appeal to the Federal Court.

## Activities to counter the poisoning

The Peregrine Group that was formed by BirdLife Switzerland after the case filmed by the webcam, has produced a leaflet about the intentional poisoning of Peregrine Falcons and other birds of prey. The leaflet explains the problem, how to recognise suspicious cases and how to react in the case of a dead bird of prey or a probable decoy pigeon. The

group is largely diffusing the leaflet to inform the public and the authorities about the topic. With this information, we hope to raise the awareness about the poisoning, to obtain clues of poisonings or the use of decoy pigeons that may lead to more condemnations. We also want to send a message to pigeon fanciers that may consider the use of poison against birds of prey: this is a cowardly, unacceptable behaviour that will be prosecuted by the authorities.

BirdLife Switzerland is also lobbying with authorities for stricter control of currently almost unregulated pigeon breeding. Furthermore, volunteers are surveying suspicious pigeon lofts.

## **Status of the Peregrine Falcon population in Switzerland and impact of the poisoning**

As in many other regions in Europe and North America, the population of the Peregrine Falcon recovered in Switzerland after the collapse between the 1950s and the 1970s. After the turn of the millennium the situation changed: in the South West part of Switzerland, the population decreased 35% between 2008 and 2015, in the Northern Jura Mountains 43% between 2009 and 2015 and 50% in the canton of Zurich between 2002 and 2015 (Kéry *et al.* 2018). As causes for the decline, Kéry *et al.* mention the predation by the Eagle Owl, whose populations are recovering in Switzerland, and the persecutions by humans, i.e. the intentional poisoning. In addition, growing human disturbance at the breeding sites (e.g. through climbers) and collisions with glass, power lines, or other energy infrastructure may also contribute to the population decline.

The few cases of poisoning may seem too sporadic to have an influence on the Peregrine Falcon population. But firstly, we certainly detect only a proportion of cases and secondly as Altwegg *et al.* (2014) and Kéry *et al.* (2018) could show in their publications, given the low numbers of birds composing the population, removing only a few individuals can lead to a critical decline in the population level.

## **Acknowledgements**

We thank all the members of the Peregrine Group and other persons who provided data about poisoned birds of prey or other suspicious deaths.

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