



BSc Thesis

Columba livia – a Study of the Rock Pigeon on the Faroe Islands

Sólvá Jacobsen and Jana Mikkelsen



Columba livia. Briss.

Dst. Fjelddue. Fær. Vildduva.

(Landt S. 270. Col. ænas. Graba S. 61).

Fjeldduen er en Standfugl, der bygger paa alle Færøerne; dog bliver den ikke meget bemærket eller ofte studt, thi den opholder sig i stejle Fjeldsider, og boer i Ungletiden inde i mørke Huler, hvorfra den besøger den dyrkede Mark for at søge Føde. Et af denne Fugls rigeste og interessanteste Byggesteder er en mørk Klippehule paa Vestsiden af Nálso. Jeg fik 2 Æg fra dens Nede; de ere større end Æggene af Col. ænas, runde og hvide (Længde 1" 5''' Brede 1" 2'''). Det kongelige Museum ejer et Exemplar, der mangler de sorte Baand over Vingerne, hvilket er omtalt af Etatsraad Reinhardt i Tidsskrift for Naturvidenskaberne.

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Abstract

The first time the pigeon was mentioned in Faroese literature was in 1673 by Lucas Debes. However the pigeon is believed to have been resident long before human settlement. Johannes Reinhardt (1826) determined that the pigeon was *Columba livia*, En: Rock Pigeon. The Rock Pigeon is dimorphic: with the typical blue-greyish plumage and a darker plumage with black spots on the wings and upper back. The origin of the spotted morph is unknown. Niels Petersen á Botni and Kenneth Williamson (1949) wrote that domestic pigeons had been kept on the Faroe Islands since 1800 at least, and that stray homing pigeons also sometimes find their way to the islands.

In spring 2007 pigeons in most villages on the Faroe Islands were studied. The object of this study was to decide how pure the Faroese Rock Pigeon is. The pigeons were sorted into four categories: typical, spotted, black and remaining. The conclusion was that the Rock Pigeon on the Faroese Islands is only slightly mixed with domestic pigeons.

Úrtak

Fyrstu ferð dúgván varð nevnd í føroyskum høpi var av Lucasi Debes (1673), men hildið verður, at bládúgván hevur verið í Føroyum, áðrenn fólk búsettust her. Johannes Reinhardt (1826) staðfesti, at vanliga dúgván í Føroyum er av slagnum *Columba livia*, Fo: bládúgva. Bládúgván finst í tveimum litbúnum: hin vanligi gráblái búnin og so ein myrkari búni, har veingir og bak hava svartar blettir. Upprunin til blettuta búnan er ókendur. Niels Petersen á Botni og Kenneth Williamson (1949) skrivaðu í eini grein, at tamdúgvur hava verið í Føroyum í minsta lagi síðani 1800, og at vilstar brævdúgvur av og á enda í Føroyum.

Várið 2007 varð farið um alt landið at telja bládúgvur. Endamálið við teljingini var at kanna, hvussu reinur føroyski stovnurin er. Dúgvurnar blivu deildar í fyra flokkar: vanligar, blettutar, svartar og rest. Niðurstøðan gjørdist, at bládúgván í Føroyum er lítið dálkað, men blanding fer fram millum villar og tamar dúgvur.

1. Introduction

1.1 The wild Rock Pigeon (*Columba livia livia*) Gmelin, 1789

The Rock Pigeon (*Columba livia*) Gmelin, 1789 is a member of the bird family Columbidae. *Columba livia* consists of 13 subspecies (Avibase) including a feral subspecies. The Rock Pigeon on the Faroe Islands is believed to be *C. l. livia* (Andersen 1898, Salomonsen 1942, Reinert 1972, Jensen *et. al.* 2005). The wild Rock Pigeon (*C. l. livia*) population is declining worldwide because of interbreeding with domestic pigeons. Today *C. l. livia* is found in remote areas in western and southern Europe, the Canary Islands, Maghreb, northern Libya, north-west Egypt, east to southern Urals, western Kazakhstan, in the northern slopes of Caucasus, Georgian SSR, Cyprus, Turkey and Iraq (Cramp 1985). In north-western Europe *C. l. livia* is only found on the Faroe Islands, the Scottish Isles and in western Ireland, (Salomonsen 1963, Harrison 1982, Danielsen 1989, Sørensen and Bloch 1990). *C. l. livia* became extinct in Norway in the 19th century (Salomonsen 1942, 1963, Haftorn 1971). It is often difficult if not impossible to see the difference between a wild and feral pigeon (Haftorn 1971, Bloch and Sørensen 1990, Michaelsen and Refvik 2003), and original distribution is obscured by the long history of domestication (Cramp 1985, Birdlife International 2004).



Figure 1.1: Dispersal of the wild Rock Pigeon *Columba livia livia* in Europe (Cramp 1985).

1.2 The feral Rock Pigeon (*Columba livia domestica*) Gmelin, 1789

Columba livia domestica is the Latin name for domesticated and feral Rock Pigeons. The Rock Pigeon has been domesticated for several thousands of years and this has resulted in a division into the subspecies *C. l. domestica* (Reinhardt 1826, Michaelsen and Refvik 2003). Feral Rock Pigeons are those that either have been released or have escaped from captivity, or they are hybrids between domestic and wild birds. Feral pigeons are found in most European cities and larger villages (Salomonsen 1963, Mortensen 1998, Michaelsen and Refvik 2003).

Domestic pigeons have been kept on the Faroe Islands at least since 1800 (Landt 1800, Petersen and Williamson 1949), but the sources do not specify whether they have been completely encaged or freely flying, the latter of course being a greater threat to the wild population. In 2006 the Faroese Food-, Veterinary- and Environmental Agency registered all poultry due to a bird flu pandemic (Appendix IV). According to the survey there are 100 domestic pigeons in Kollafjørð, Streymoy, and 210 in Tórshavn, Streymoy. The registration was voluntary and must therefore be taken with reservation. In addition to this some stray homing pigeons occasionally visit the islands from neighbouring countries (Petersen and Williamson 1949, Reinert 1972).

1.3 Rock Pigeon on the Faroe Islands

The first person to write about the pigeon on the Faroe Islands was Lucas Debes (1673). He wrote that the pigeon was a resident bird. Later Jens Chr. Svabo (1783) also described the pigeon as a resident bird. In those years the population was declining, and most birds were found nesting in caves on Mykines and Nólsoy. Jørgen Landt (1800) remarked that pigeons visit the sowed fields in the spring, and that a few officials kept domestic pigeons.

Both Svabo and Landt wrote about the pigeon as being the Stock Pigeon *Columba oenas* Linnaeus, 1758 (fig. 1.3), but in 1826 Johannes Reinhardt determined that the Faroese pigeon was *C. livia* based upon the studies he made on some pigeon coats from the Royal Museum and the European Birdcollection¹. Reinhardt also determined that the Rock Pigeon was far more common on the Faroe Islands than previously assumed and that it was dimorphic; the typical morph and a spotted morph.

Carl Julian Graba visited the Faroe Islands in 1828 and wrote about the Rock Pigeon in his diary (1830). He closely examined two specimens from Nólsoy. One was spotted and the other rather unusual, as it had rusty-yellow edges on the contour feathers and only a single black bar on one of the wings. Graba said that the pigeon was common and nested on almost every island and he agreed with Reinhardt that it must be *C. livia* rather than *C. oenas*. Graba wrote that there was a noticeable difference between the wild and the domestic pigeons; the wild pigeons are very shun and easily escape birds of prey, while the domestic pigeons often get caught.

Knud Andersen (1898) wrote that about half of the Faroese Rock Pigeon population on Nólsoy was spotted. This was normally seen as a transitional stage between the wild and domestic pigeon, but Andersen did not agree, since the Nólsoy population had never been seen in contact with domesticated pigeons. According to letters sent from Niels Petersen á Botni there were only two or three domestic pairs on Nólsoy. In 1902(b) Andersen wrote that the Rock Pigeons from time to time fly between Nólsoy and Streymoy.

Finn Salomonsen (1942) made a description of the Rock Pigeon on the Faroe Islands. He remarked that the pigeon is dimorphic. Both morphs were common and had been even when domesticated pigeons were very rare. The population had declined during the last century. The pigeon fed on turnip seeds, grains and seeds of wild grass.

¹ We have not been able to find the location of the Royal Museum and the European Birdcollection, but most likely it is London.

Niels Petersen á Botni and Kenneth Williamson (1949) discussed the polymorphism and breeding of the Rock Pigeon on the Faroe Islands. The typical-spotted ratio was 1:7 when the population was at its peak, but fell to 1:15-20 in winter time indicating that the spotted pigeons are less able to survive severe winters. Petersen and Williamson also said that the spotted morph is a recessive trait probably involving more than one gene.

Andrias Reinert (1972) wrote that the end of the grain cultivation at the turning of the 19th century had caused a significant decline in the Rock Pigeon population. The birds now became much more dependent upon food given to sheep or poultry. This made the pigeons less shy. Reinert also wrote that stray homing pigeons from time to time reached the islands. Some of them interbred with the resident pigeons, but it seemed that the population remained genuine.

1.4 Appearance

The typical wild Rock Pigeon (*C. l. livia*) (fig. 2.6) has a light blue-grey colour on the upper back, wings and underbody. The head is a little darker. It is white under the wings and on the lower back. The neck glistens with a metallic green and purple colour. On each wing there are two distinct black wingbars, which are visible both when the bird rests and in flight. The bill is black and the cere mealy white. The eyes and feet are red. The full length of the Rock Pigeon is 31-34 cm (Cramp 1985). The spotted morph (fig. 2.7) is usually a bit dimmer than the typical pigeon and has black spots on the upper back and wings. The feral Rock Pigeon (*C. l. domestica*) can appear in many different plumages, but it can also be indistinguishable from the wild Rock Pigeon (fig. 1.2) (Haftorn 1971, Bloch and Sørensen 1990, Michaelsen and Refvik 2003).



Figure 1.2: Some feral pigeons (left) look very much like wild Rock Pigeons (right). But there are some differences e.g. the cere and indications of a third wingbar (Photos: Internet (left), Lars Larson (right)).

Feral birds sometimes have grey backs and under wingcoverts, and are easily confused with *C. oenas* (fig. 1.3) (Cramp 1985, Sørensen and Bloch 1990).



Figure 1.3: The Stock Pigeon *Columba Oenas*. Some feral Rock Pigeons resemble the Stock Pigeon because of the grey lower back (Photo: internet).

Ferals tend to have a larger cere than wild Rock Pigeons and sometimes a white eye ring (fig. 1.4) (Cramp 1985, Michaelsen and Refvik 2003).



Figure 1.4: The difference between a wild Rock Pigeon (left) and a homing pigeon (right) are clearly visible on close up. Notice the cere, area around the eye and shape of the head (Photos: Jens-Kjeld Jensen).

1.5 Dimorphism

The Faroese Rock Pigeon, like Rock Pigeons elsewhere, is dimorphic (section 1.4) (Andersen 1898, Salomonsen 1942, Petersen and Williamson 1949, Michaelsen and Refvik 2003). The spotted variety is a recessive trait (Petersen and Williamson 1949), but its origin is uncertain. Michaelsen and Refvik (2003) argued that the spotted morph is feral, because it is seen in larger extent in urban habitats. The number of spotted pigeons seems to vary a lot. Some years the ratio between spotted and typical pigeons is about 1:1 (Andersen 1898, Salomonsen 1942), while in other years it is down to 1:15-20 (Petersen and Williamson 1949). The spotted pigeons die in greater extent in harsh winters than the typical pigeons (Petersen and Williamson 1949). This does not necessarily indicate feral ancestry (Andersen 1898). Perhaps the explanation is that the gene for the spotted trait is linked to another gene causing the birds to be less resistant to harsher climates. The spotted pigeons have been common on the Faroe Islands long before pigeon breeding became common (Andersen 1898, Salomonsen 1942).

1.6 Behaviour

In winter and spring time the Faroese Rock Pigeons make up flocks, but in the summer they form pairs. During the day, especially in the morning, the birds gather where domestic animals are fed (Petersen and Williamson 1949, Reinert 1972) especially poultry (own observations). The Rock Pigeon is predominantly granivorous (Landt 1800, Reinhardt 1826, Graba 1830, Holm 1855, Müller 1863, Salomonsen 1942, Petersen and Williamson 1949, Joensen 1966, Haftorn 1971, Cramp 1985); occasionally they eat green leaves, buds and invertebrates (Cramp 1985). During the afternoon the pigeons move to the rocky area in the hills to rest and preen or in the small rivers to bath and drink (Petersen and Williamson 1949). Although the Rock Pigeon has an excellent navigational sense (Cramp 1985, Bloch and Sørensen 1990), it is a resident bird (Svabo 1783, Reinhardt 1826, Graba 1830, Holm 1849, Müller 1863, Andersen 1898, Salomonsen 1942, Petersen and Williamson 1949, Joensen 1966, Haftorn 1971, Harrison 1982, Bloch and Sørensen 1990).

1.7 Breeding

The nesting period for the Faroese Rock Pigeon lasts from March to October depending on the weather. Each pair nests 2-3 times a year. Most often the hen lays two eggs, and both parents brood (Müller 1863, Petersen and Williamson 1949, Haftorn 1971). The nesting area is usually quite inaccessible; below rocks and in caves on mountain slopes or in flocks in larger caves near the sea shore (Svabo 1783, Landt 1800, Graba 1830, Holm 1849, 1855, Müller 1863, Andersen 1898, Salomonsen 1942, Lees 1946, Petersen and Williamson 1949, Joensen 1966, Haftorn 1971, Harrison 1982, Sørensen and Bloch 1990, Michaelsen and Refvik 2003). The Faroese Rock Pigeon has once been seen to share a nesting cave with a Puffin (*Fratercula arctica*) (Andersen 1902b). One of the biggest nesting places on the Faroe Islands is on the east side of Nólsoy (Holm 1849, Petersen and Williamson 1949, Salomonsen 1963, Joensen 1966). In Scotland breeding goes on all year round (Lees 1946). Worldwide the wild Rock Pigeon nests on remote

inaccessible rock-faces, especially coastal, while the ferals are attached to human settlement, nesting in church towers and in lofts, attics or brick spaces of large buildings such as railway stations, factories, warehouses etc (Cramp 1985, Danielsen 1989, Michaelsen and Refvik 2003).

1.8 Life span and mortality

The Rock Pigeons usually live for 3-4 years (Cramp 1985, Appendix III); though one ringed bird has been found to be about 9 years old (pers. comm. J-K. Jensen). There is a high mortality rate in harsh winters mainly because of low food supply (Reinhardt 1826, Müller 1863, Andersen 1898, Petersen and Williamson 1949, Joensen 1966). The Faroese population size tends to vary a lot (Svabo 1783, Andersen 1902a, Salomonsen 1942, Petersen and Williamson 1949). At the end of the 19th century it decreased a great deal because much of the crop cultivation came to an end (Andersen 1898, Joensen 1966, Reinert 1972). Today the population seems to have adjusted to the new conditions (Reinert 1972).

1.9 Objective

The primary purpose of this study was to determine to which extent the Faroese Rock Pigeon population was mixed with that of the domesticated one. In order to do this we have made an overall description of the biology and ecology of the Rock Pigeon. Secondly we take a closer look at the ratio of typical and spotted pigeons around the country, and make an estimation of the total population size.

2. Materials and Methods

2.1 Study area

The Faroe Islands are situated at 62°N and 7°W. The islands are about 1400 km², a part of northern Europe, situated about 300 km to the north-west of Shetland. There are 18 islands of which all are inhabited except Lítla Dímun. The climate is temperate with cool summers and mild winters. The sky is often overcast and heavy winds and fog are common. The islands are rocky and rugged and the coasts are mostly bordered by cliffs. The natural vegetation cover is grassland (Lund 1997). The first successful plantation of trees was in the beginning of the 20th century, and today there are plantations in about 15 villages/towns (Leivsson 1989). The plantations consist mainly of coniferous trees (Lund 1997). The Collared Dove *Streptopelia decaocto* Frivaldszky, 1838 and the Woodpigeon *Columba palumbus* Linnaeus, 1758 have become more common on the Faroe Islands after the plantations (pers. comm. D. Bloch).

2.2 Study period

The research was done from mid February to mid April 2007.

2.3 Collecting the data

For this study we drove to all the villages in Viðoy, Borðoy, Eysturoy, Streymoy, Vágur, Sandoy and Suðuroy to count Rock Pigeons (fig. 2.6). If there were pigeons seen between villages, they were added to the countings in a near by village.

The pigeons frequently fly between neighbouring villages e.g. Tórshavn and Nólsoy to feed (fig. 2.1) (Andersen 1902b, Joensen 1966, Sørensen and Bloch 1990, Mortensen 1998, Appendix III, own observations) so to avoid counting the same pigeon twice, we tried as best to count in nearby villages on the same day.



Figure 2.1: Travel distances for four ringed Rock Pigeons (Appendix III).

We only counted before noon as the pigeons gather in flocks in the villages during the morning to feed. In the afternoon they spread to the hills (Petersen and Williamson 1949). The pigeons shelter in harsh weather i.e. in heavy rain, wind, snow etc. (own observations), therefore we aimed to count in fair weather, however this failed at some locations (e.g. most of Eysturoy). We sorted the pigeons into four categories by appearance:

- **Typical:** The typical pigeon's body colour is blue-grey, with a white area on the lower back. There are two distinct black bars on each wing (fig. 2.2).



Figure 2.2: The typical Rock Pigeon's characteristics: white area on the lower back, two black wingbars (Photo: Silas Olufson).

- **Spotted:** Like the typical pigeon but often with a bit darker body colour. The wing bars are a bit broader and there are black spots on the wings and upper back which vary to a degree in number (fig. 2.3) (Petersen and Williamson 1949).



Figure 2.3: The spotted pigeon varies a lot in appearance; from almost clear to almost black winged. Above are two intermediates (Photos: Jens Kjeld Jensen (left) Janus Hansen (right)).

- **Black:** Black all over. This is a type of melanism that relatively frequently occurs for some bird species (Netfugl). Two pigeons with typical plumage have been observed to conceive a melanic chick (fig. 2.4) (pers. comm. J-K. Jensen).



Figure 2.4: The melanic Rock Pigeon is black all over (Photo: Janus Hansen).

- **Remaining:** All pigeons that do not fit in one of the first three categories. These are:
 - albino birds. Albinos often have low vitality in nature, therefore it is more likely that the albinos we observe are domestic.
 - mucky birds. If a bird is dirty, it can be difficult to see its true plumage (fig. 2.5 lower left).
 - leucistic birds (sometimes wrongly called 'partial albinism'). Leucism is one of the most frequently occurring colour mutations (fig. 2.5 lower right) (Netfugl).
 - birds with unusual plumages (fig. 2.5 upper left).
 - densely spotted birds (fig. 2.5 upper right).



Figure 2.5: Four pigeons that would be grouped as remaining (Photos: Internet (upper left), Jens-Kjeld Jensen (lower left), Jana Mikkelsen (upper and lower right)).

Without doubt there are pigeons in this last category that are indeed wild. Both albinism and leucism occur sporadically in nature. Mucky and densely spotted birds are only placed in this group as a precaution.

For the countings we mostly used handheld binoculars (7x50) and sometimes a small telescope (32x77). In each village we wrote down the number of pigeons in each category (i.e. typical, spotted, black and remaining).

Since we knew of an open dovecot in Tórshavn, Streymoy, we avoided to count in that area. Later we have learned that domestic pigeons are also held in Húsavík, Sandoy, and judging by the countings a dovecot is also in Húsar, Kallsoy (according to our contact there were 5 white pigeons in Húsar).

To collect data from the remaining 9 islets (Lítla Dímun excluded, because there are no inhabitants), we contacted local people to do the countings for us. Six people responded, so all in all we have data from 13 of the 17 inhabited islands (fig. 2.6). In the letter that was sent to the islets there followed an instruction as well as four questions:

1. *Have there been domestic pigeons in the village. If yes, when?*

One can expect to see more feral pigeons in the village, if domestication occurs or recently has occurred.

2. *Do you know how many Rock Pigeons are in the village (estimate)?*

To get a feeling of how much of the total population is included in the countings.

3. *Do Rock Pigeons nest near the village?*

To see if there is a relationship between nesting area and number of pigeons in the village.

4. *How many pigeons have you counted in each category (i.e. typical, spotted, black and remaining)?*

A space was left for comments.

All data collected was saved on a spreadsheet (Appendix I).

Furthermore we sent a letter to FaroeNature (a Faroese internet forum for people interested in biology) where we asked volunteers to help us count and give us useful information about Rock Pigeons e.g. where the pigeons gather in the different villages. Also we asked for detailed pictures of Rock Pigeons.

The response was poor. We got hints of some nesting areas and one man could tell of occasional shootings in Fuglafjørður, Eysturoy. However, the pictures received were very useful.



Figure 2.6: Map showing countings done respectively by authors and islanders.

2.4 Comments (sources of error)

Since we did not make all the countings ourselves there is a risk of inaccuracy. The islanders were not trained birdwatchers. Most of them misunderstood the second question, and none of them knew of nesting areas close to their village.

The data was collected from mid February to mid April, and the pigeons sometimes start breeding as early as March (Müller 1863, Petersen and Williamson 1949, Haftorn 1971). Therefore the late countings might be biased.

Shootings also affect the data. We know directly and indirectly of four villages (Fuglafjørður, Norðadalur, Tórshavn and Nólsoy) where shootings occur or have occurred, although this is illegal according to Faroese law. Birds with irregular plumage are shot e.g. leucistic and mongrel.

Counting in the larger villages was somewhat more difficult than in the smaller villages since the pigeons move around a lot. Therefore it might well be that we have counted some pigeons more than once there.

3. Results

We visited 87 villages ourselves (some neighbour villages are clubbed together) and got response from 6 islet villages. In total there were counted 1946 Rock Pigeons (table 1).

	Typical	Spotted	Black	Remaining	Total
N	1526	318	14	86	1946
%	78,4	16,3	0,7	4,5	100

Table 1: The countings.

The detailed data can be found in Appendix I.

Some villages were visited twice and it turned out to be little or no variation in pigeon numbers (table 2).

	First count	Second count	Difference
Langasandur	0	0	0
Streymnes	3	3	0
Vestmanna	3	3	0
Bður	0	2	2
Kirkjubður	1	2	1
Skopun	1	3	2
Vágur	6	4	2

Table 2: Villages visited twice.

This research is a quantitative study, therefore it is difficult to do actual statistical tests.

3.1 Wild vs. remaining

It cannot be determined whether the spotted pigeons are wild or feral. We have chosen to group them as wild, since they have been common in nature for at least a couple of hundred years (Reinhardt 1826, Petersen and Williamson 1949).

When we remove all villages with no crossbreeding (villages having no “remaining” pigeons) and further exclude villages with less than 20 countings, the ratio between wild (i.e. typical, spotted and black) and remaining is as shown in table 3 and fig. 3.1.

Island	Village	Wild	Remaining	Total	% Remaining
Nólsoy	Nólsoy	65	2	67	3,0
Streymoy	Syðradal	77	1	78	1,3
Streymoy	Norðadalur	22	1	23	4,3
Vágar	Miðvágur	66	3	69	4,3
Vágar	Sandavágur	50	3	53	5,7
Kunoy	Kunoy	46	1	47	2,1
Borðoy	Klaksvík	145	3	148	2,0
Eysturoy	Eiði	71	1	72	1,4
Eysturoy	Hellur	38	1	39	2,6
Streymoy	Tórshavn	233	22	255	8,6
Streymoy	Kollafjørður	44	2	46	4,3
Eysturoy	Æðuvík	32	4	36	11,1
Eysturoy	Runavík	51	4	55	7,3
Eysturoy	Leirvík	34	2	36	5,6
Eysturoy	Fuglafjørður	42	1	43	2,3
Sandoy	Skálavík	30	3	33	9,1
Sandoy	Húsavík	38	7	45	15,6
Suðuroy	Hvalba	41	4	45	8,9
Suðuroy	Froðba	25	1	26	3,8
Kallsoy	Húsar	32	5	37	13,5

Table 3: The 20 villages with the highest crossbreeding.

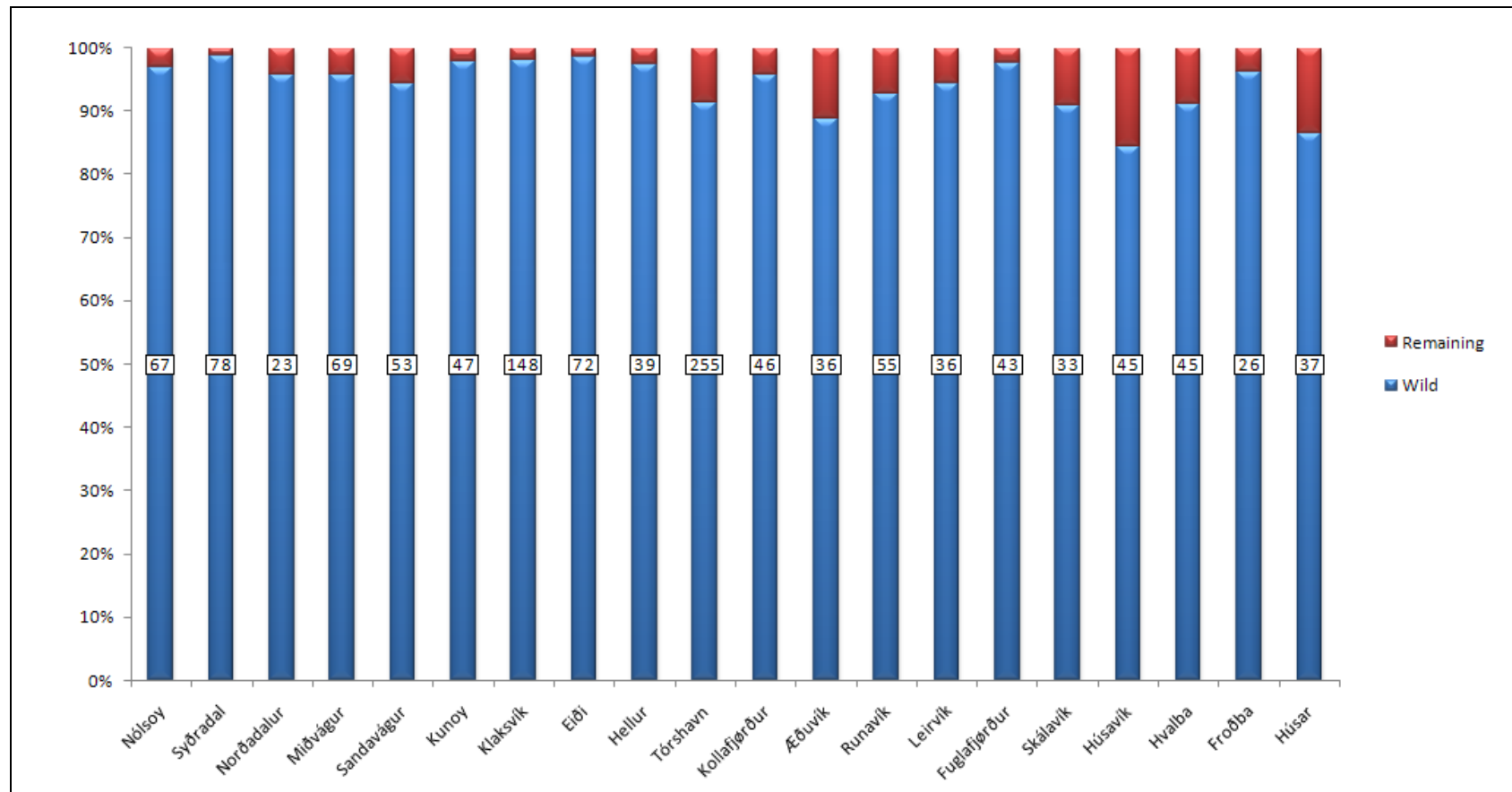


Figure 3.1: Percentage of wild and remaining in the villages with the highest crossbreeding (data from table 3).

The total mean crossbreeding for the Faroe Islands is 4,5%. The highest crossbreeding is in Húsavík, Sandoy (15,6%), due to an open dovecot.

The domestic pigeons that have been kept on Fugloy and St. Dímun (Appendix I) do not seem to have mixed with the wild population.

3.2 Morph variation in local stocks

The circles in fig. 12 show how many birds are respectively typical + black, spotted and remaining. For the calculations to be comparable we have joined neighbouring villages with less than 20 pigeons into larger units. Altogether there are 25 areas (Appendix II). Typical and black pigeons are combined, since they are both considered to be wild and because there were very few black pigeons.

The mean ratio of typical + black and spotted pigeons is 1:5, but it varies from 1:1 (Húsar, Kallsoy) to 1:32 (Nólsoy).

Shootings of spotted pigeons naturally affect the typical-spotted ratio, but the great variation in the typical-spotted ratio might also be a sign of low interbreeding between stocks from neighbouring villages (see also section 4.3).

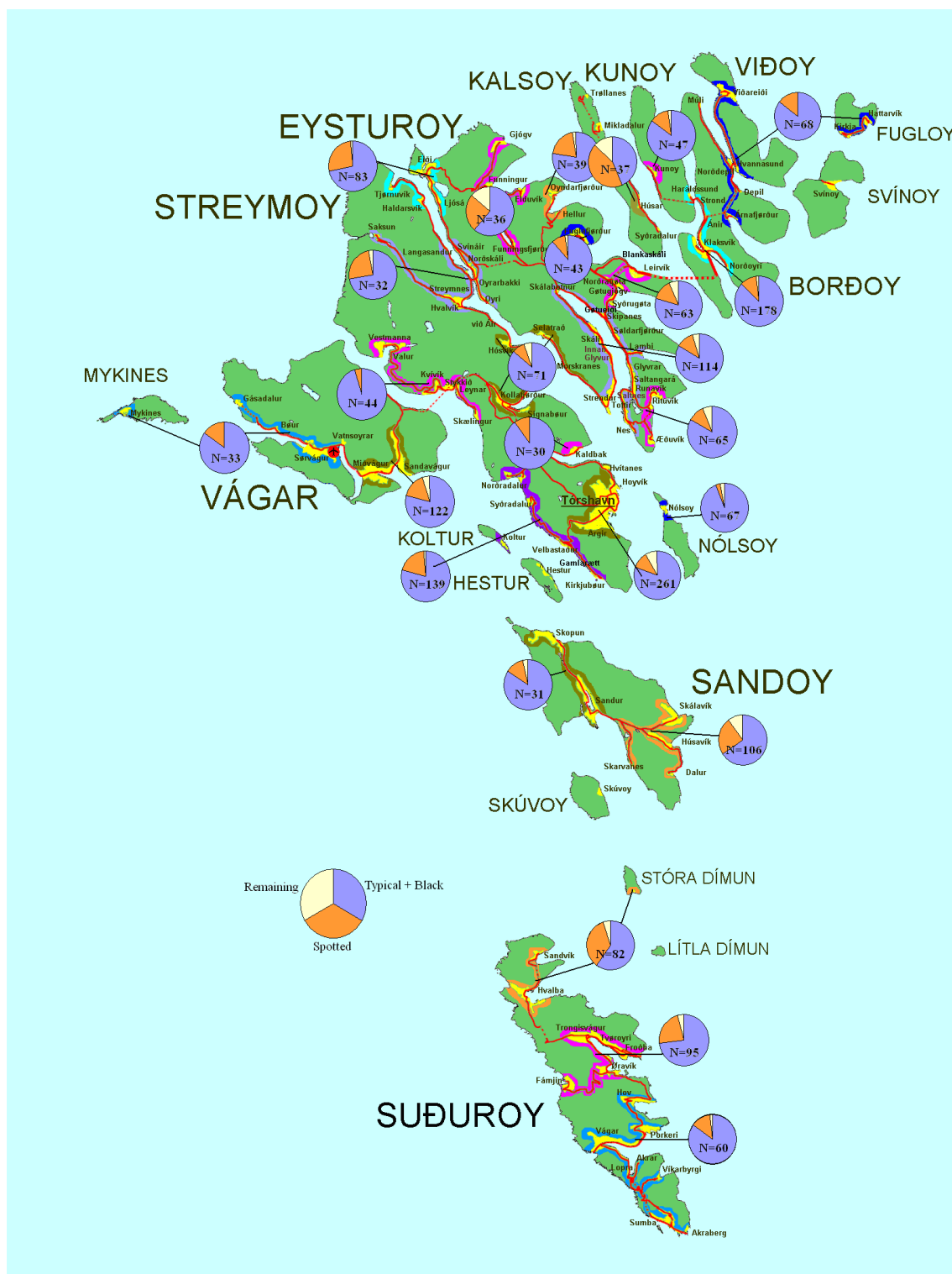


Figure 3.2: The distribution of typical, spotted and remaining pigeons for 25 larger areas (Appendix II).

3.3 Number of Rock Pigeons compared to inhabitants and poultry

The Rock Pigeon on the Faroe Islands is to a certain degree dependent upon human settlement as it to a large extent feeds on poultry feed or sown seed (Petersen and Williamson 1949, Reinert 1972, own observations). Ferals only live in inhabited areas (Cramp 1985).

In fig. 3.2 we have compared the number of Rock Pigeons to the number of human inhabitants to get an idea of to which subspecies the pigeon belongs.

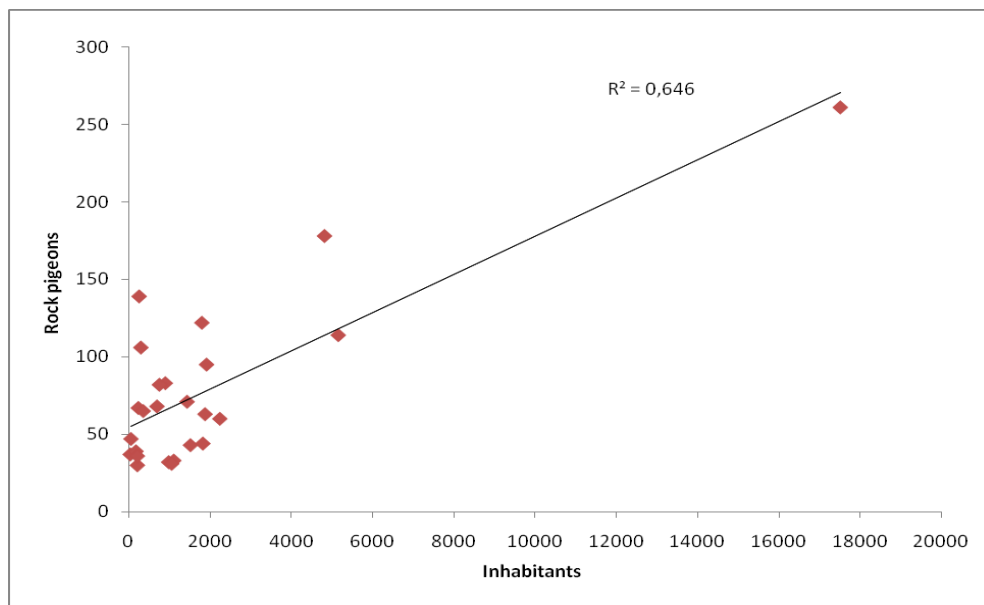


Figure 3.3: Number of pigeons compared to the number of inhabitants in the 25 areas (Appendix II).

There is no correlation between the number of inhabitants (Hagstova Føroya) and the number of pigeons in an area ($R^2 = 0,646$) (fig. 3.3).

Comparing the number of pigeons to poultry (Appendix IV) does not show any correlation either ($R^2 = 0,406$) (fig. 3.4). Appendix IV does not specify how the poultry is kept. Pigeons only gather by open cages.

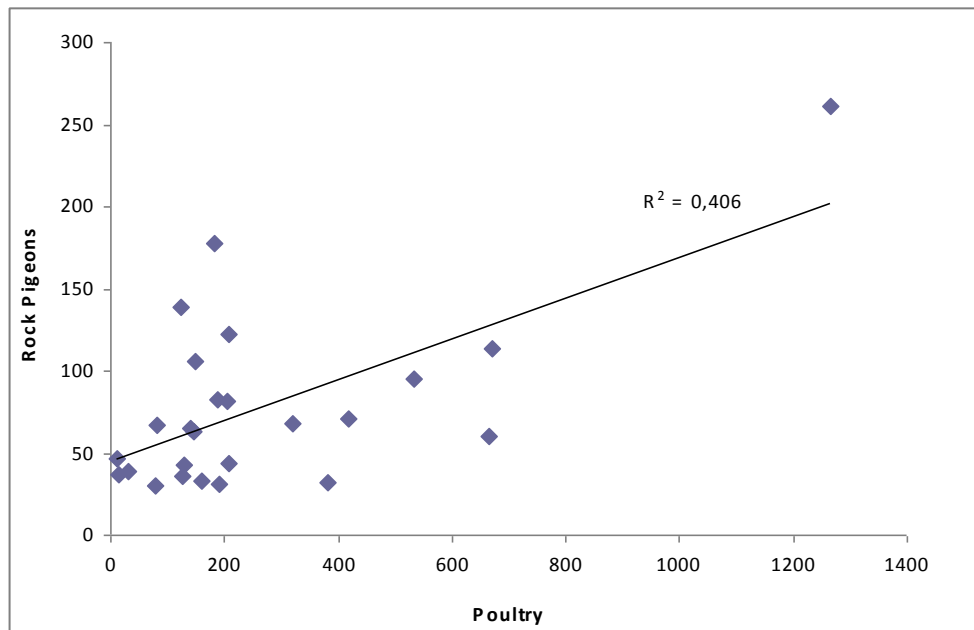


Figure 3.4: Number of pigeons compared to poultry in the 25 areas (Appendix II).

3.4 Population estimates

Based on the nationwide birdcount in 1981 (Atlas 1981) estimations on the Rock Pigeon breeding population varies from 250-500 pairs (Bloch and Sørensen 1984, BirdLife International 2004) to 600 pairs (Jensen *et. al.* 2005).

In this study we have a total birdcount of 1946 e.g. roughly 1000 pairs. We guess that there might very well be 500-600 birds that we have failed to see for various reasons i.e. the countings on the 25th and 26th of february (except for Eiði) are very low, most likely due to bad weather. The isle-countings are lower than expected, maybe because they were done during the early nesting period. Joensen (1966) claims that larger flocks can be found in locations where we have no data. Therefore we estimate the total population to be 1200-1300 pairs.

4. Discussion

4.1 Wild or feral?

The Faroese Rock Pigeon is considered to be wild (*Columba livia livia*) (Andersen 1898, Salomonsen 1942, Reinert 1972, Jensen *et. al.* 2005), but in reality it can be very hard to distinguish between *C. l. livia* and *C. l. domestica* (fig. 1.2) (Haftorn 1971, Bloch and Sørensen 1990, Michaelsen and Refvik 2003). In this study we have only observed the pigeons from a distance and in most cases only noted the colouration of the plumage. Therefore we cannot with absolute certainty conclude that the Rock Pigeons on the Faroe Islands are wild (*C. l. livia*). However, there are other signs that indicate this. The pigeons seem to have small ceres (fig. 1.4). As well as this, their behaviour is similar to that of the wild pigeon: they are very shy (Graba 1830, Müller 1863, Patursson 1932, Lees 1946), they are not found in city centres like feral pigeons throughout Europe (Mortensen 1998), and as far as we know they only nest like wild pigeons (Holm 1849, Petersen and Williamson 1949). Comparing the number of pigeons to number of inhabitants we see that there is no correlation between the two (fig. 3.3). This indicates wild ancestry.

However, to be absolutely certain to which of the subspecies the Faroese Rock Pigeon belongs, it is necessary to do more thorough examinations of the birds, probably DNA analyses (Mortensen 1998, Michaelsen and Refvik 2003).

4.2 Why does the Faroese Rock Pigeon population remain wild?

This study shows that the Faroese Rock Pigeons are quite pure. This is somewhat unexpected since we can assume that released and escaped domestic pigeons, as well as sporadically visiting homing pigeons from neighbouring countries have had the opportunity to mix with the Faroese pigeons for a long time (Petersen and Williamson

1949, Reinert 1972, Sørensen and Bloch 1990, Mortensen 1998). The reason for the low crossbreeding is partly due to shootings. Furthermore, it is likely that domestic pigeons are less resistant to the harsh weather during the winter as well as they are less able to compete for mates and food, and therefore seldom live long enough to reproduce in nature (Michaelson and Refvik 2003). Many homing pigeons that loose their way to the Faroe Islands die within a few days (pers. comm. J-K. Jensen). It is not likely that birds of prey are to blame, since the only falcon resident on the islands is the Merlin (*Falco columbarius*). A hen Merlin is able to kill a pigeon, but this rarely occurs (pers. comm. J-K. Jensen). Gulls and Ravens are not considered to be a threat either (Graba 1830).

4.3 The typical-spotted ratio

The ratio between typical and spotted pigeons varies from time to time. In 1949 Niels Petersen claimed that the usual ratio was 1:15-20, but in special conditions (mild winters) the ratio has been known to change to 1:7 (Petersen and Williamson 1949). In this study we have found an overall ratio of about 1:5. We do not know if this ratio is consistent, since we have only been studying the pigeons for two months. The winters may have become more favourable for the spotted pigeons during these last 50 years.

In Nólsoy leucistic and densely spotted pigeons were killed by humans in early 1980's, but for this study (anno 2007) Jens-Kjeld Jensen counted only two spotted and two remaining pigeons out of a total of 67 (Appendix I). This indicates that even though the pigeons frequently fly between Nólsoy and Tórshavn to feed (Andersen 1902b, Joensen 1966, Sørensen and Bloch 1990, Mortensen 1998, Appendix III, own observations), the two stocks do not mix very much.

5. Conclusion

The Faroese Rock Pigeon is most likely *Columba livia livia*. We do not consider the wild population to be endangered since less than 5% of the total population are feral.

One of the reasons for the purity of the Faroese Rock Pigeon population is the location of the islands. The Faroe Islands are geographically isolated (fig. 1.1) and relatively few homing pigeons loose their way to these regions. Furthermore these pigeons often die within a few days of arrival. Pigeon breeding has been common on the Faroe Islands for at least two centuries, but either the domestic pigeons do not crossbreed with the wild pigeons to a high extent or the offspring are less viable for some reason. Some pigeons are also shot.

It cannot be said for certain whether the origin of the spotted morph is wild or feral. Approximately one out of five pigeons on the Faroe Islands is spotted. These pigeons flock together and mate with typical pigeons and their behavior is similar too. Amongst other things this indicates that the spotted pigeon is wild. Besides this the Faroese Rock Pigeon, as well as other Rock Pigeon populations, have been dimorphic for a long time. On the other hand if we are to consider the spotted pigeons as feral, the total population has to be the same.

The Rock Pigeon is common on the Faroe Islands. We estimate the total population to be 1200-1300 pairs.

Our study of the Faroese Rock Pigeon is only preliminary. For future studies we would recommend that observations and countings are done more than once in each area. Likewise, more notes need to be taken e.g. presence of poultry. To increase data reliability it is best that all observations and countings are done by the same person(s).

Also it would be interesting to study the flying patterns of the pigeons more closely by ringing the pigeons and/or using radio transmitters e.g. to see how neighbouring stocks interbreed.

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Links:

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Hagstova Føroya:

http://www.hagstova.fo/portal/page?_pageid=33,56287and_dad=portaland_schema=PORTAL (population size anno 2006)

Netfugl:

http://www.netfugl.dk/forum.php?id=threadandforum_id=4andthread_id=11363

Pigeon observations done between 16.02.07 and 22.04.07

Island	Village	Date	Normal	Spotted	Black	Remaining	Total	Notes
Nólsoy	Nólsoy	16-02-2007	63	2		2	67	Countings done by Jens-Kjeld Jensen. Leucistic and densely spotted pigeons were killed in early 1980's.
Streymoy	Kirkjubø	17-02-2007	2				2	
Streymoy	Velbastað	17-02-2007	18	7	3		28	
Streymoy	Syðradal	17-02-2007	58	19			77	
Streymoy	Norðadalur	17-02-2007	21	1			22	Dark pigeons are shot.
Streymoy	Leynar	17-02-2007	27	1			28	
Streymoy	Skælingur	17-02-2007					0	
Streymoy	Stykkið	17-02-2007	11				11	
Streymoy	Kvívík	17-02-2007	2				2	
Streymoy	Vestmanna	17-02-2007	2	1			3	
Vágar	Gásadalur	18-02-2007	3				3	
Vágar	Bøur	18-02-2007	2				2	
Vágar	Sørvágur	18-02-2007	11	5			16	
Vágar	Vatnsoyrar	18-02-2007					0	
Vágar	Miðvágur	18-02-2007	55	11		3	69	
Vágar	Sandavágur	18-02-2007	41	9		3	53	
Streymoy	Kaldbak	18-02-2007	27	3			30	
Viðoy	Viðareiði	24-02-2007	17	5			22	
Viðoy	Hvannasund	24-02-2007	27	4			31	
Borðoy	Árnafjørður	24-02-2007	4	1			5	
Kunoy	Kunoy	24-02-2007	40	6		1	47	
Kunoy	Haraldssund	24-02-2007	10	4			14	
Borðoy	Klaksvík	24-02-2007	130	14	1	3	148	
Borðoy	Norðoyri	24-02-2007	14	2			16	
Streymoy	Tjørnuvík	25-02-2007	4	4			8	Raining.
Streymoy	Haldarsvík	25-02-2007	3				3	
Streymoy	Langasandur	25-02-2007					0	
Eysturoy	Eiði	25-02-2007	52	19		1	72	Sheltering at the north end of village.
Eysturoy	Ljósa	25-02-2007					0	
Eysturoy	Svíná	25-02-2007	6	2			8	
Eysturoy	Norðskáli	25-02-2007	3	2		1	6	
Eysturoy	Oyrabakki	25-02-2007	3	2			5	

Island	Village	Date	Normal	Spotted	Black	Remaining	Total	Notes
Eysturoy	Oyri	25-02-2007	1				1	
Streymoy	Streymnes	25-02-2007	1	2			3	
Streymoy	Hvalvík	25-02-2007	3				3	
Eysturoy	Selatrað	26-02-2007	4	1		1	6	Snowing from time to time.
Eysturoy	Morskranes	26-02-2007					0	
Eysturoy	Kolbanagjógv	26-02-2007	3				3	
Eysturoy	Strendur	26-02-2007	2				2	
Eysturoy	Innan Glyvur	26-02-2007	1				1	
Eysturoy	Skáli	26-02-2007	6	1		1	8	
Eysturoy	Skálabotnur	26-02-2007					0	
Eysturoy	Hellur	26-02-2007	30	8		1	39	One albino pigeon.
Eysturoy	Oyndarfjørður	26-02-2007					0	
Streymoy	Tórshavn	02-03-2007	202	30	1	22	255	Avoided to count where domestic pigeons are held.
Streymoy	Hvítanes	02-03-2007	6				6	
Streymoy	Saksun	03-03-2007	6				6	
Streymoy	Hósvík	03-03-2007	15			1	16	
Streymoy	Kollafjørður	03-03-2007	38	5	1	2	46	Raining.
Streymoy	Signabøur	03-03-2007					0	
Eysturoy	Rituvík	07-03-2007	24	4	1		29	
Eysturoy	Æðuvík	07-03-2007	29	3		4	36	
Eysturoy	Nes	07-03-2007	3	1			4	
Eysturoy	Toftir	07-03-2007	6	2			8	
Eysturoy	Saltnes	07-03-2007					0	
Eysturoy	Runavík	07-03-2007	46	4	1	4	55	
Eysturoy	Lambi	07-03-2007					0	
Eysturoy	Søldarfjørður	07-03-2007	12	3			15	
Eysturoy	Skipanes	07-03-2007	18	3			21	
Eysturoy	Syðrugøta	07-03-2007	9			2	11	
Eysturoy	Gøtugjógv	07-03-2007	2				2	
Eysturoy	Norðagøta	07-03-2007	8	6			14	
Eysturoy	Leirvík	07-03-2007	31	3		2	36	
Eysturoy	Fuglafjørður	07-03-2007	38	4		1	43	
Sandoy	Skopun	09-03-2007	2	1		1	4	
Sandoy	Sandur	09-03-2007	21	3	3		27	
Sandoy	Húsavík	09-03-2007	38	12		7	57	Pigeon domestication in the village.

Island	Village	Date	Normal	Spotted	Black	Remaining	Total	Notes
Sandoy	Dalur	09-03-2007	7	4		1	12	
Sandoy	Skálavík	09-03-2007	22	8		3	33	
Sandoy	Skarvanes	09-03-2007	2	2			4	
Eysturoy	Funningsfjørður	11-03-2007	8	3		3	14	
Eysturoy	Elduvík	11-03-2007	7	1			8	
Eysturoy	Funningur	11-03-2007	7	5		2	14	
Eysturoy	Gjógv	11-03-2007					0	Raining/snowing.
Suðuroy	Sandvík	30-03-2007	1				1	
Suðuroy	Hvalba	30-03-2007	25	14	2	4	45	
Suðuroy	Nes	30-03-2007	13	15			28	
Suðuroy	Hov	30-03-2007	11	1		1	13	
Suðuroy	Porkeri	30-03-2007	9	4			13	
Suðuroy	Vágur	30-03-2007	5	1			6	
Suðuroy	Lopra	30-03-2007	1				1	
Suðuroy	Akrar	30-03-2007	3	1			4	
Suðuroy	Víkarbyrgi	30-03-2007					0	
Suðuroy	Sumba	30-03-2007	22	1			23	
Suðuroy	Fámjin	30-03-2007	8	2		2	12	
Suðuroy	Froðba	31-03-2007	19	6		1	26	
Suðuroy	Tvøroyri	31-03-2007	36	13	1		50	
Suðuroy	Øravík	31-03-2007	5	1		1	7	
Stóra Dímun	Dímun	01-04-2007	8				8	Countings done by Jóhan Petur Olsen. Domestic pigeons kept between 1987-95 (around 50-100 birds).
Koltur	Koltur	01-04-2007	8				8	Countings done by Bjørn Patursson.
Fugloy	Hattarvík/Kirkja	02-04-2007	10				10	Countings done by Marianna Dahl. 2-3 pairs of domestic pigeons kept in 1989.
Mykines	Mykines	14-04-2007	12				12	Countings done by Esbern í Eyðansstovu.
Kallsoy	Húsar	22-04-2007	16	16		5	37	Countings done by Cecilia Hansen.
Total:			1526	318	14	86	1944	

Villages grouped into 25 larger areas

Island	Village	Wild	Spotted	Remaining	Total
Streymoy	Kirkjubø	2			2
Streymoy	Velbastað	21	7		28
Streymoy	Syðradal	58	19	1	78
Streymoy	Norðadalur	21	1	1	23
Koltur	Koltur	8			8
		110	27	2	139
Streymoy	Leynar	27	1		28
Streymoy	Skælingur				0
Streymoy	Stykkið	11			11
Streymoy	Kvívík	2			2
Streymoy	Vestmanna	2	1		3
		42	2	0	44
Mykines	Mykines	12			12
Vágar	Gásadalur	3			3
Vágar	Bøur	2			2
Vágar	Sørvágur	11	5		16
Vágar	Vatnsøyrar				0
		28	5	0	33
Vágar	Miðvágur	55	11	3	69
Vágar	Sandavágur	41	9	3	53
		96	20	6	122
Borðoy	Árnafjørður	4	1		5
Fugloy	Hattarvík/Kirkja	10			10
Viðoy	Viðareiði	17	5		22
Viðoy	Hvannasund	27	4		31
		58	10	0	68
Kunoy	Kunoy	40	6	1	47
Kallsoy	Húsar	16	16	5	37
Kunoy	Haraldssund	10	4		14
Borðoy	Klaksvík	131	14	3	148
Borðoy	Norðoyri	14	2		16
		155	20	3	178
Streymoy	Tjørnuvík	4	4		8
Streymoy	Haldarsvík	3			3
Eysturoy	Eiði	52	19	1	72
Eysturoy	Ljósá				0
		59	23	1	83

Appendix II

Island	Village	Wild	Spotted	Remaining	Total
Streymoy	Langasandur				0
Eysturoy	Svíná	6	2		8
Eysturoy	Norðskáli	3	2	1	6
Eysturoy	Oyrabakki	3	2		5
Eysturoy	Oyri	1			1
Streymoy	Streymnes	1	2		3
Streymoy	Hvalvík	3			3
Streymoy	Saksun	6			6
		23	8	1	32
Streymoy	Hósvík	15		1	16
Streymoy	Kollafjørður	39	5	2	46
Streymoy	Signabøur/Oyrareingir				0
Eysturoy	Selatrað	4	1	1	6
Eysturoy	Morskranes				0
Eysturoy	Kolbanagjógv	3			3
		61	6	4	71
Nólsoy	Nólsoy	63	2	2	67
Streymoy	Kaldbak	27	3		30
Streymoy	Tórshavn	203	30	22	255
Streymoy	Hvítanes	6			6
		209	30	22	261
Eysturoy	Hellur	30	8	1	39
Eysturoy	Oyndarfjørður				0
		30	8	1	39
Eysturoy	Strendur	2			2
Eysturoy	Innan Glyvur	1			1
Eysturoy	Skáli	6	1	1	8
Eysturoy	Skálabotnur				0
Eysturoy	Nes	3	1		4
Eysturoy	Toftir	6	2		8
Eysturoy	Saltnes				0
Eysturoy	Runavík	47	4	4	55
Eysturoy	Lambi				0
Eysturoy	Søldarfjørður	12	3		15
Eysturoy	Skipanes	18	3		21
		95	14	5	114
Eysturoy	Rituvík	25	4		29
Eysturoy	Æðuvík	29	3	4	36
		54	7	4	65

Island	Village	Wild	Spotted	Remaining	Total
Eysturoy	Syðrugøta	9		2	11
Eysturoy	Gøtugjógv	2			2
Eysturoy	Norðagøta	8	6		14
Eysturoy	Leirvík	31	3	2	36
		50	9	4	63
Eysturoy	Fuglafjørður	38	4	1	43
Sandoy	Skopun	2	1	1	4
Sandoy	Sandur	24	3		27
		26	4	1	31
Sandoy	Húsavík	38	12	7	57
Sandoy	Dalur	7	4	1	12
Sandoy	Skálavík	22	8	3	33
Sandoy	Skarvanes	2	2		4
		69	26	11	106
Eysturoy	Funningsfjørður	8	3	3	14
Eysturoy	Elduvík	7	1		8
Eysturoy	Funningur	7	5	2	14
Eysturoy	Gjógv				0
		22	9	5	36
Stóra Dímun	Dímun	8			8
Suðuroy	Sandvík	1			1
Suðuroy	Hvalba	27	14	4	45
Suðuroy	Nes	13	15		28
		49	29	4	82
Suðuroy	Froðba	19	6	1	26
Suðuroy	Tvøroyri	37	13		50
Suðuroy	Øravík	5	1	1	7
Suðuroy	Fámjin	8	2	2	12
		69	22	4	95
Suðuroy	Hov	11	1	1	13
Suðuroy	Porkeri	9	4		13
Suðuroy	Vágur	5	1		6
Suðuroy	Lopra	1			1
Suðuroy	Akrar	3	1		4
Suðuroy	Sumba	22	1		23
		51	8	1	60

Marked and recovered Rock Pigeons on the Faroe Islands

Latin name	Marking date	Age	Retrieving date	Marking place	Retrieving place
Columba livia	08-09-1994	2	07-07-1999	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	21-08-1995	4	12-09-1997	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	21-08-1995	4	15-06-1997	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	29-03-1994	6	15-11-1994	Kvívík, Faroe Islands	Argir, Faroe Islands
Columba livia	03-10-1984	3	15-02-1985	Nólsoy, Faroe Islands	Tórshavn, Faroe Islands
Columba livia	20-10-1984	3	21-02-1985	Nólsoy, Faroe Islands	Tórshavn, Faroe Islands
Columba livia	26-11-1984	2	31-12-1985	Nólsoy, Faroe Islands	Tórshavn, Faroe Islands
Columba livia	26-11-1984	4	12-02-1985	Nólsoy, Faroe Islands	Tórshavn, Faroe Islands
Columba livia	29-12-1984	2	13-03-1985	Nólsoy, Faroe Islands	Tórshavn, Faroe Islands
Columba livia	02-05-1985	4	20-12-1986	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	02-06-1986	3	02-02-1995	Nólsoy, Faroe Islands	Boganes, Hoyvik, Tórshavn, Faroe Islands
Columba livia	07-04-1989	2	21-01-1994	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	21-02-1991	4	19-11-1992	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	25-06-1997	3	27-01-1998	Nólsoy, Faroe Islands	Flatnagerði, Tórshavn, Faroe Islands
Columba livia	13-10-1997	2	21-06-2001	Nólsoy, Faroe Islands	Viðareiði, Viðoy, Faroe Islands
Columba livia	04-11-1998	2	19-10-1999	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	29-05-1999	3	08-12-1999	Nólsoy, Faroe Islands	Eiði, Eysturoy, Faroe Islands
Columba livia	29-05-1999	3	24-04-2003	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	25-06-1999	3	24-04-2003	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	26-06-1999	4	01-09-2000	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	06-10-2002	2	30-07-2003	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	06-10-2002	2	30-12-2003	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	06-10-2002	2	30-12-2003	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	21-04-2003	4	26-10-2004	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	24-04-2003	4	30-12-2003	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	14-03-2004	4	05-09-2006	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands
Columba livia	31-10-2004	2	29-09-2005	Nólsoy, Faroe Islands	Nólsoy, Faroe Islands

Kommuna	Bygd	Dunnur	Gæs	Hønur	Svanir	Kalkunir	Æður	Dúgvur	Fasánar	Páfuglar	Moskusdunnur	Íalt
Sandavágs kommuna	Sandavágur	52	59	12								123
Sjóvar kommuna	Strendur	25	28	36								89
	Morskranes	8	0	0								8
	Selatrað	13	9	0								22
	Innan Glyvur	10	8	13								31
	Kolbeinagjógv	3	4	7								14
Kvívíkar kommuna	Skælingur	6	12	0								18
	Leynar	5	29	5								39
	Stykkið	27	0	5								32
	Válur	5	0	0								5
	Kvívík	4	2	0								6
Fámjins kommuna		6	6	12								24
Fugloyar kommuna	Hattarvík	14	28	25								67
	Kirkja	15	22	22								59
Skúvoyar kommuna	Skúvoy	14	8	8								30
	Dímun	3	13	0								16
Svínoyar kommuna	Svínoy	23	12	5								40
Sørvágs kommuna	Gásadalur	0	2	7								9
	Sørvágur	16	51	26								93
	Bøur	0	2	7								9
	Mykines	15	24	6								45
Sunda kommuna	Tjørnuvík	0	27	6								33
	Haldórsvík	1	32	12								45
	Langasandur	6	9	31		5						51
	Streymnes	21	28	12								61
	Hvalvík	15	22	9								46
	Hósvík	5	31	24								60
	Saksun	0	7	0								7
	Gjógv	18	2	0								20
	Norðskáli	17	27	69		5						118
	Oyrarbakki	22	16	7								45
	Oyri	12	25	10								47

Kommuna	Bygd	Dunnur	Gæs	Hönur	Svanir	Kalkunir	Æður	Dúgvur	Fasánar	Páfuglar	Moskusdunnur	Jamt
Skálavíkar kommuna	Skálavík	5	49	8								62
Leirvíkar kommuna	Leirvík	3	26	16								45
Miðvágss kommuna	Miðvágur	28	29	29								86
	Vatnsoyrar	3	0	0								3
Viðareidiss kommuna	Viðareidi	29	9	46								84
Fuglafjarðar kommuna	Fuglafjørður	12	18	98								128
	Hellurnar	0	0	5								5
	Kambisdalur	2	2	4								8
Hvannasunds kommuna		22	16	46								84
Hövs kommuna		23	102	26		2						153
Vestmanna kommuna	Vestmanna	36	51	21								108
Hvalbiar kommuna	Hvalba	35	45	108								188
Funnings kommuna		9	42	6								57
Kunoyar kommuna	Kunoy	0	5	5								10
	Haraldssund	24	11	57								92
Sumbiar kommuna	Sumba	28	42	78								148
	Lopra	3	4	0								7
	Akrar	0	2	19								21
Runavíkar kommuna	Skipanes	10	11	4								25
	Rituvík	11	30	19								60
	Æðuvík	48	27	6		3						84
	Skáli	26	12	47								85
	Skálafjørður	8	10	9								27
	Elduvík	8	10	0								18
	Funningsfjørður	8	22	0	1							31
	Søldarfjørður	46	49	109		3						207
	Lambi	0	16	11								27
	Glyvrar	7	31	52								90
	Saltangará	12	14	13								39
	Runavík	1	0	3								4
	Oyndarfjørður	13	12	0								25

Kommuna	Bygd	Dunnur	Gæs	Hønur	Svanir	Kalkunir	Æður	Dúgvur	Fasálar	Páfuglar	Moskusdunnur	Íalt
Húsavíkar kommuna	Húsavík	5	18	39								62
	Dalur	0	18	6								24
Sands kommuna	Sandur	13	50	57								120
Eiðis kommuna	Eiði	40	21	22			2					85
	Ljósá	3	14	10		3						30
	Svínáir	2	6	8								16
Vágs kommuna	Vágur	64	66	102								232
Gøtu kommuna	Norðragøta	3	28	0								31
	Syðrugøta	3	19	41								63
	við Gøtugjógv	0	4	2								6
	undir Gøtueiði	0	0	0								0
Porkeris kommuna	Porkeri	61	36	10								107
Skopunar kommuna	Skopun	34	29	8								71
Klaksvíkar kommuna	Klaksvík	34	22	31								87
	Árnafjørður	16	11	0								27
	Norðoyri	0	2	0								2
	Trøllanes	24	10	36								70
	Mikladalur	0	6	13								19
Nes kommuna	Nes	7	12	6								25
	Saltnes	4	8	5								17
	Toftir	7	0	0								7
Húsa kommuna	Húsar	9	6	0								15
Tórshavnar kommuna	Argir	11	49	1								61
	Hoyvík	28	25	33								86
	Hvítanes		8	26								34
	Kaldbak	3	15	60								78
	Kaldbaksbotnur	2	5	8								15
	Kirkjubøur		6	3								9
	Kollafjørður	75	148	56				100				379
	Koltur		10	5								15
	Nólsoy	40	18	22								80
	Norðradalur	7	20	4								31

Kommuna	Bygd	Dunnur	Gæs	Hønur	Svanir	Kalkunir	Æður	Dúgvur	Fasámar	Páfuglar	Moskusdunnur	Ialt
Tórshavnar kommuna, framhald	Oyrareingir	6	6									12
	Signabøur		10	14								24
	Syðradalur	24	14	10								48
	Tórshavn	270	422	393	5	4		210	8	13		1.325
	Velbastaður		20									20
	Hestur		2	1								3
Tvøroyrar kommuna	Froðba	14	12	54								80
	Øravík	5	46	34								85
	Øravíkarlið		6	16								22
	Trongisvágur	41	81	10							3	135
	Tvøroyri	48	39	102		2						191
Ialt		1.744	2.590	2.469	6	27	2	310	8	13	3	7.172