

Pests recorded in the Faroe Islands, 1986-1992

Dórete Blöch and Henri Mourier

Úrtak

Hesi seinastu árinu hefur Djóradeildin á Føroya Náttúrugripasavni viðgjört alt størri part av teimum skaðadýrum, sum eru latin inn, 113 í 1992. Flestu teirra eru fráboðað úr Tórshavn, flest eisini í mun til fólkatalið. Til samans eru 357 fráboðað. Tey eru bytt sundur soleiðis: 85 (24.1%) hússkaðadýr, 94 (26.7%) matvøruskaðadýr, 46 (13.1%) eru dýr, sum orkymla menniskju, og 127 (36.1%) eru meira og minni meinaleys.

Av teimum hússkaðadýrum, sum voru innlatin, er mest av fyri (52 skrásetingar). Hann flygur í juli-september, ikki sum tjóvaklukkan (35 skrásetingar), sum líkist fyri, men sum sæst alt árið. Millum tey dýrnid eta matvørur, er mest av tjóvaklukku, henni á baki er tjóruklukkan (26 skrásetingar), silvurskottur (14 skrásetingar) og hyggiklukkan (5 skrásetingar).

Staraloppán er til ampa í summum húsum í mars-juni. Dustlúsin sæst alt árið.

Alt árið koma vit fram á ymisk meira og minni meinaleys skaðadýr, grátt undir steini og eiturkoppur alt árið. smærumottan er virkin í mai-juni, tvístertan í juli-september, svartaklukkan, *Carabus problematicus* í august-oktober, og at enda gulleygad frá september-november.

Tað tykist, sum starvsárið hjá einum hópi av skaðadýrum víkur nakað frá tí, sum vit kenna í Danmark. Hetta kemur av havveðurlagnum her, sum ger, at tað er lættari at hóra undan teir lýggju vetrarnar, men sum krevur longri menningarskeið tey køldu sumrin.

Introduction

Due to their geographical situation, the Faroe Islands have a cold, wet oceanic climate and are separated from their nearest neighbours, Shetland, Iceland and Norway, by at least 300 km. Mild winters ($+4^{\circ}\text{C}$), cold summers ($+11^{\circ}\text{C}$) and a large immigration distance have had a filter effect on the number of animals occurring in the Faroes, including those referred to as pests. This results in a quantitative border, especially from Shetland and north to the Faroes (Bengtson, 1980; 1982; Enckell, 1987).

An animal will be classified as a pest when its occurrence has a negative effect on human life and activities, such as by transmitting diseases, eating food supplies or otherwise decreasing the quality of human life. Many pests are synanthropes, meaning that they cannot survive in colder climates outside human dwellings. To these belong many of our common pests. Examples from the Faroese pest fauna are the German cockroach, *Blatella germanica*, and the silverfish, *Lepisma saccharina*.

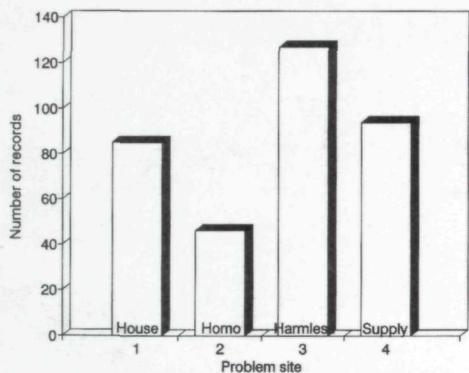


Fig. 1. Specimens brought to the Museum of Natural History in Tórshavn as pests, distributed according to location of discovery. N=357.

Mynd 1. Dýrasløg send til Føroya Náttúrugripasavn, býtt eftir finningarstaði. N=357.

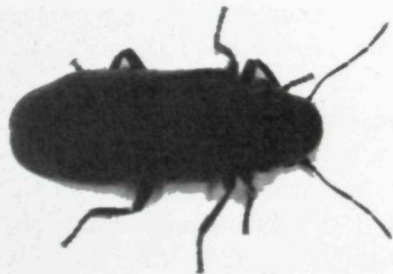


Fig. 2. The wood-boring beetle, *Anobium punctatum*. Total length: 3-5 mm.

Mynd 2. Fýrur, *Anobium punctatum*. Longd: 3-5 mm.

Other species with a close relationship to man are the anthropochorous species. These are transported passively by man and not able to survive outside human settlements. Recent studies from the Faroes have shown that once introduced, some of the outdoor anthropochorous species will sur-

vive at the locality even after humans have moved away (see for instance Enckell, 1985; 1987; Enckell *et al.*, 1986; 1987; Enckell and Rundgren 1988; 1989). To this group belongs the house mouse (*Mus musculus*), brought by the Vikings to Iceland (Sæmundsson, 1939) and Greenland (Hatting, 1982) and probably also to the Faroes, although the first written record is as late as 1592 (Degerbøl, 1940). The brown rat (*Rattus norvegicus*) arrived later, in 1768 (Degerbøl, 1940). Still today, these rodents are unequally distributed throughout the country (Reinert, 1982).

Human society has changed a great deal over the centuries, and the 20th century has seen increased travelling and trading between countries. This has resulted in an increasing influx of different species. Moreover, mass communications in the latter half of the 20th century have increased knowledge of foreign cultures and have also increased awareness of and interest in the many and various species of animals and insects in the environment.

Material and methods

In the Faroe Islands, the usual practice in previous times was to send the pests to the Danish Pest Infestation Laboratory for identification and advice on how to deal with them. Gradually, as the Faroese community grew and developed, a greater proportion of these pests has been treated locally by veterinarians, the Food and Environmental Institute and the Agricultural Research Center. But over the last decade, an increasing number have been treated at the

Zoological Department of the Museum of Natural History in Tórshavn. Regular consultation is still maintained with experts at the Danish Pest Infestation Laboratory. This is most often the case when a new or rare specimen occurs, or if the pest in question represents a serious economic risk to the locality where it is found.

This material consists of the pest specimens sent to the Danish Pest Infestation Laboratory from 1983 onwards as well as most of the specimens brought to the Zoological Department of the Museum since 1976, although records are not complete prior to 1986.

When a pest specimen is brought to the Zoological Department it is identified according to zoological keys, the most common of which have been Hallas and Mourier (1984; 1987) and Mourier *et al.* (1975), as well as special keys in some cases. Once identified, the specimen is conserved in 70% ethanol and recorded according to locality and date. The finder receives a written acknowledgment issued by the Danish Pest Infestation Laboratory.

The aim of this study is to sample the records in order to examine which species are most common in the Faroes and whether there is any visible pattern of occurrence and abundance according to season and distribution in the country. The records for some species are frequent enough after several years of sampling that differences from year to year may also be apparent.

Only the most common species of pests are treated in this study, as well as a few others which, for particular reasons, may be of special interest.

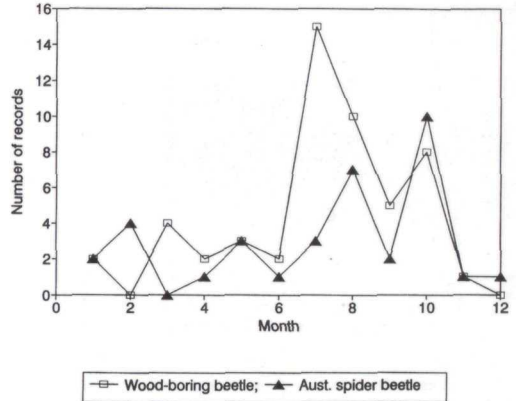


Fig. 3. Monthly distribution of the wood-boring beetle, *Anobium punctatum* (N=52) and the Australian spider beetle, *Ptinus tectus* (N=35).
Mynd 3. Mánaðarbýtið av fýri, *Anobium punctatum* (N=52) og tjóvaklukku, *Ptinus tectus* (N=35).

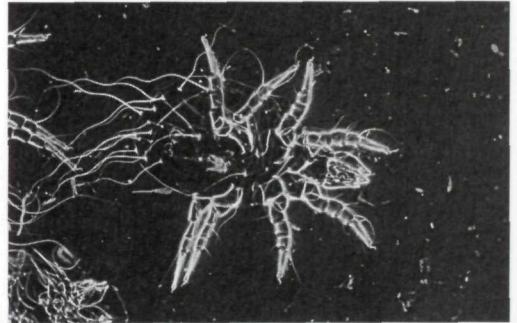


Fig. 4. The mite, *Tyrophagus palmarum*, from *skerpikjøt*, dried lamb meat. Total length 0.5-1 mm.

Mynd 4. Motta, *Tyrophagus palmarum*, av *skerpikjøti*.
Longd: 0.5-1 mm.

Faroese pest control legislation

None of the pests discussed here have ever caused severe problems in the Faroes. Hay mites, for instance, are a great problem in Iceland, but have for unknown reasons never been a problem in the Faroes (Hallas,



Fig. 5. The australian spider beetle, *Ptinus tectus*. Total length: 3-4 mm.

Mynd 5. Tjóvaklukka, *Ptinus tectus*. Longd: 3-4 mm.

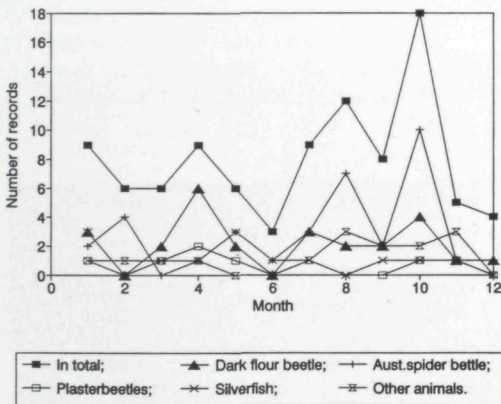


Fig. 6. Monthly distribution of food supply eating species, in total N=95. The dark flour beetle, *Tribolium destructor* (N=26), the Australian spider beetle, *Ptinus tectus* (N=35), the silverfish, *Lepisma saccharina* (N=14), the fungus beetle, *Clavicornia* sp. (N=7).

Mynd 6. Mánadarbýtið av skaðadýrum í mati, íalt N=95. Tjørulukka, *Tribolium destructor* (N=26), tjóvaklukka, *Ptinus tectus* (N=35), silvurskottur, *Lepisma saccharina* (N=14), hýggiklukka, *Clavicornia* sp. (N=7).

1981; Hallas and Solberg, 1989, Iversen *et al.*, 1990).

Faroese legislation related to pests in-

cludes a regulation concerning plant diseases and pests (nr. 370 dated 21 December 1938), as well as the Environment Act and the Health Act. This includes the control of rats ordered by the local community, so this paper will not deal with rodent pests. The use of poisons against pests is permitted for under the health regulations (Djurhuus *et al.*, 1992).

Classification of pests

Pests are normally classified according to where they cause damage. Here, the following categories are used:

1. Pests damaging buildings, household goods, books and clothes.
2. Pests eating food supplies.
3. Ectoparasites and other pests causing physical irritation to humans.
4. More or less harmless animals living in human settlements or houses as regular or occasional/winter guests.

Of these four groups (Fig. 1), those pests which attack human food (no. 4) and houses (no. 1) occur in great numbers, and are in fact those most commonly known as pests. The group of pests which irritate humans or attack their plants in houses and gardens (no. 2) are much underestimated in this connection, as they have been treated by medical doctors, horticulturalists and the Agricultural Research Center.

Examples from all four groups, which occur regularly in the Faroe Islands, will be mentioned here.

Description of the most common pests in the Faroes

1. Pests damaging buildings, household goods, books and clothes

The webbing or clothes moth, *Tineola bisselliella*, is not common in the Faroes. It has only been recorded once, which is fortunate in a country with a large production of wool.

The only example of importance belonging to this group is the wood-boring beetle, *Anobium punctatum* (Fig. 2), with 52 records (14.6%). It has a peak season from June to October, culminating in July (Fig. 3). The newly hatched adults fly out of the timber to mate and lay their eggs over a brief period of a couple of weeks. The eggs are often laid in the holes bored by the adult beetles, and when the larvae appear after a few weeks, they enter the timber where they live for the next 2 to 3 years. The rest of the year the adult beetles can be found dead on the floor, under the roof or on cellar windowsills.

Of other animals which cause damage to houses, only a few have been recorded, such as house longhorn beetle, *Hylotrupes bajulus*, (1 record), bark borer beetle, *Ernobius mollis*, (2 records), oak longhorn, *Phymatodes testaceus*, (1 record), pinhole borer beetle, *Xyloterus lineatus* (1 record).

2. Pests eating food supplies

A special Faroese phenomenon is the mites which live on the wind-dried legs of lamb, *skerpikjøt*. These mites do not eat the meat, rather it is the mould or fungi which is the meat-eater. Normally the special shed in which the meat is dried, known as *hjallur*,



Fig. 7. The dark flour beetle, *Tribolium destructor*. Total length: 5-6 mm.

Mynd 7. Tjørulukka, *Tribolium destructor*. Longd: 5-6 mm.

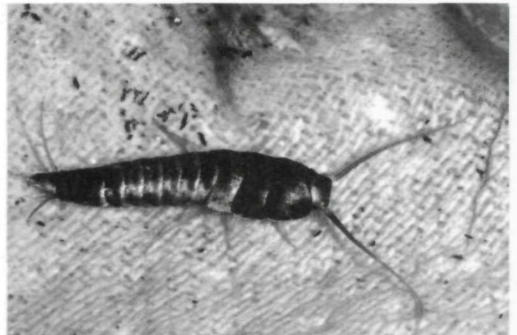


Fig. 8. A silverfish, *Lespisma saccharina*. Total length: 10-12 mm.

Mynd 8. Silvurskottur, *Lespisma saccharina*. Longd: 10-12 mm.

is cleaned thoroughly before the slaughtered lambs are hung to dry in October. Sometimes after cleaning the sheds, remains from the previous year may be left, and these can be the origin of "living dust", containing thousands of mites. The mite from the Faroese *skerpikjøt* is the species *Tyrophagus palmarum* (Fig. 4). Related species, *T. longior* and *Glycyphages*

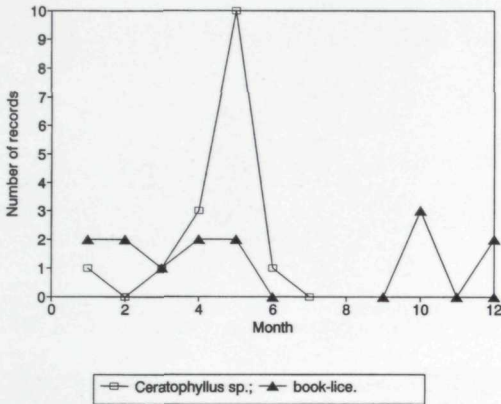


Fig. 9. Monthly distribution of pests causing physical irritation. The bird flea, *Ceratophyllus sp.*, (N=14), the book-lice, *Copeognatha sp.* (N=13).

Mynd 9. Mánaðarbýtið av skaðadýrum, ið bita. Staraloppur, *Ceratophyllus sp.*, (N=14), dustlýs, *Copeognatha sp.* (N=13).



Fig. 10 The cat flea, *Ctenocephalides felis*. Total length: 2-3 mm.

Mynd 10. Kettuloppa, *Ctenocephalides felis*. Longd: 2-3 mm.

domesticus are found on dried fish in Iceland (Bloch and Hallas, 1988).

Pests which eat human food, either in the larger warehouses or the smaller household stores, can pose economic problems for

both commercial grocers and private households. Several common species have been recorded, as well as some occurring less frequently. Normally the occurrence of these kinds of pests results in some degree of expense due to the necessary cleaning, discarding of affected food, and purchasing of new stores.

The second most frequently recorded species is the Australian spider beetle, *Ptinus tectus* (35 records, 9.8%). This is around the same size and colour as of the wood-boring beetle (Fig. 5), but unlike that species, the spider beetle does not have a peak season of occurrence (Fig. 3). The spider beetle lives in many houses and can be seen in small numbers throughout the year, especially in the larders or in other places where edibles such as dried fish or meat are stored. Should an empty container or jar stand in one place for any length of time, it may act as a trap for this insect. Spider beetles eat every available dried food item and they are not normally so numerous that they cause any significant damage. This Australian beetle first arrived in Europe around 1900, where it in many places has displaced the previous very common white-marked spider beetle, *Ptinus fur*. The Australian spider beetle is nowadays a worldwide pest, including in the Faroes. The white-marked spider beetle, on the other hand, belongs to the natural outdoor insect fauna in Denmark, but not in the Faroes, where it has been recorded only twice (West, 1930; Bengtson, 1981).

Another common eater of stored products is the dark flour beetle *Tribolium*

destructor (26 records, 7.3%, Fig. 6). This is a slim, brown beetle of a few mm in length (Fig. 7). It has a very characteristic smell of lysol which makes it easy to detect when it occurs in flour or grain in the larder. This beetle often wanders around in the house and can be found considerable distances from the food stores, where it can survive for months without eating. The dark flour beetle originates in Ethiopia in Africa and appeared for the first time in Europe in Germany in 1934 in some imported violet seed. The next recorded occurrence was in Sweden in 1936, in seed imported from Germany as food for captive birds, and it has since then been a widely distributed synanthrope. It was first recorded in Denmark in 1943 and has since become very common there as well as in the Faroes.

The silverfish occurs with 13 records (3.6%) equally distributed over the year. It is a primitive wingless insect (Fig. 8). Its body is covered with shiny silver scales and it can live for up to 4 or 5 years. The silverfish is nocturnal, hiding in crevices during the day. It lives in moist places and is most commonly found in bathrooms. It is omnivorous, and although it seldom occurs in great numbers, it may damage food-stuffs.

Among other insects which have only been recorded a few times from domestic food stores is the German cockroach with 5 records (1.4%). This is a 3-4 cm long fast-moving insect, it is often found in large numbers and is difficult to get rid of.

The fungus beetles *Clavicornia spp.* consist of several species of tiny beetles (2-

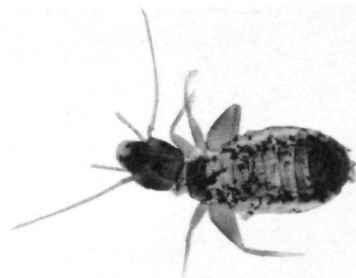


Fig. 11. The book-louse *Copeognatha sp.* Total length: 1-2 mm.

Mynd 11. Dustlýs, *Copeognatha sp.* Longd: 1-2 mm.

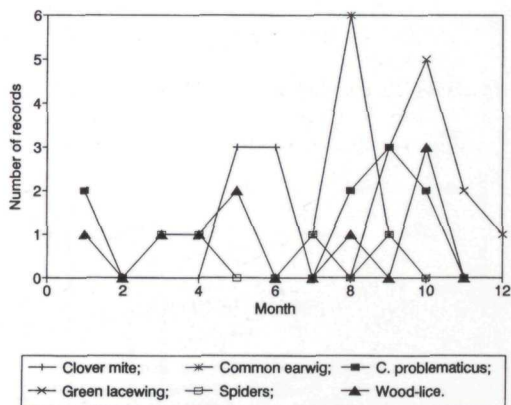


Fig. 12. Monthly distribution of more or less harmless species. The clover mite, *Bryobia praetiosa* (N=6), the common earwig, *Forficula auricularia* (N=8), the Carabid beetle, *Carabus problematicus* (N=9), the green lacewing, *Chrysopa carnea* (N=11), the woodlice, *Oniscoidea*, (N=9), the Aracnidae groups: the harvestmen, *Opiliones* and the spiders, *Araneae* (N=4).

Mynd 12. Mánaðarbýtið av meinaleysum dýrum. Smærumotta, *Bryobia praetiosa* (N=6), tví-sterta, *Forficula auricularia* (N=8), svartaklukka, *Carabus problematicus* (N=9), gulleypa, *Chrysopa carnea* (N=11), grátt undir steini, *Oniscoidea*, (N=9), torvatrøll, *Opiliones* og eiturkoppur, *Araneae* (N=4).



Fig. 13. A green lacewing, *Chrysopa carnea*. Total length: 20-25 mm.

Mynd 13. Gulleyga, *Chrysopa carnea*. Longd: 20-25 mm.

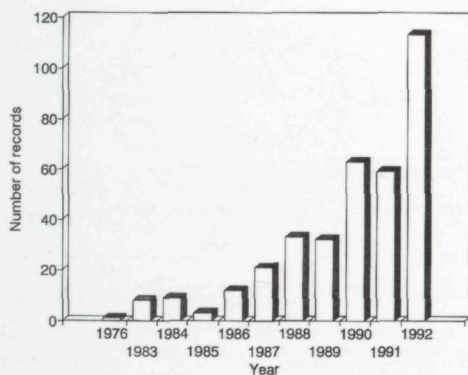


Fig. 14. Number of specimens brought to the Museum of Natural History, Tórshavn over the years, N=257.

Mynd 14. Nøgðin av dýrum, sum Náttúrugripasavnið hevur viðgjørt, N=257.

3 mm) which live on mould and their occurrence is a sign that food supplies are too moist. They have been recorded 3 times (0.9%) from October to April.

The final four species to mention here are the yellow mealworm *Tenebrio molitor*, the Indian meal moth *Plodia interpunctella*, the saw-toothed grain beetle *Oryzaephilus surinamensis* and the cadelle or bolt-ing cloth beetle, *Tenebrioides mauritanicus*, all recorded 1-3 times each.

3. Ectoparasites and other pests causing physical irritation to humans

In the Faroe Islands, the *Nematocera* group *Culicidae*, the mosquitos, do not occur, while the group *Ceratopogonidae*, the midges are numerous in the summertime represented by 5 species (Pedersen, 1971).

Some members of the group *Acarina*, the mites, are ectoparasites on water birds, especially the *Alcidae*, and they also attack man. Faroe Islanders are very familiar with these ectoparasites in their daily life. One example is the puffin-tick, *Ixodes uriae*, a mite from the puffin, *Fratercula arctica* and other birds of especially the *Alcidae*. It is well described by Fristrup (1942) as an ectoparasite which also affects people handling the birds. This species leaves humans after a few bites, or, as is more usual, it dies when biting and can cause an itching inflammation. The Museum has only once received one specimen, even though it is common and well-known in places with many puffins and guillemots (*Uria aalge*). The common *Ixodes ricinus*, known from more southerly countries, has not been a regular member of the natural

fauna (Trägårdh, 1931), but over the last few years it has been found three times (Hallas and Olsen, 1990).

Many hay mites live in the hay stores, but as mentioned before, they do not create the same severe problems of hay allergy as in the neighbouring countries of Iceland and Shetland (Hallas, 1981; Hallas and Solberg, 1989; Iversen *et al.*, 1990).

Some members of the group *Siphonaptera*, the fleas, are ectoparasites on birds, dogs and cats, and may attack man. The most common are bird fleas *Ceratophyllus sp.*, which have the starling *Sturnus vulgaris* as host and they have been recorded 14 times (4.0%). The fleas from the starling nests have a short season from March to June (Fig. 9). They winter in the empty bird nests as pupae and hatch in March to May of the following year. If the birds have not yet returned to their nests or have moved to a new nest, the fleas will search for a new host. In the course of their movement, they may enter houses and bite people. They only survive a short period inside houses, and by May the problem is over.

The next most common fleas are those having dogs and cats as hosts (*Ctenocephalides felis*), with 4 records (1.1%). The cat flea (Fig. 10), in particular, seems to have become an increasing problem in recent years, perhaps due to a combination of more cats and dogs as pet animals living inside houses, and the interior furnishings, including wall-to-wall carpets, from which it is very difficult to get rid of fleas.

The occurrence of book-lice, *Copeoglyphus* *sp.*, with 14 records (3.9%) is quite different (Fig. 9). These tiny insects can be

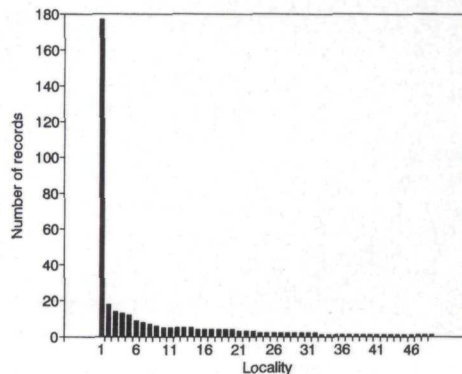


Fig. 15. Distribution of delivered specimens according to location. Tórshavn=1 (N=177); Vestmanna=2 (N=18); Argir=3 (N=14); Klaksvík=4 (N=13); Vágur=5 (N=12).

Mynd 15. Nøgðin av dýrum býtt eftir staði. Tórshavn=1 (N=177); Vestmanna=2 (N=18); Argir=3 (N=14); Klaksvík=4 (N=13); Vágur=5 (N=12).

found all year round in houses which are a little too moist (Fig. 11). They live on the mould fungus which grows on moist food stores, walls and furnitures, etc. and may have a negative effect on people suffering from allergies or asthma when they occur in great numbers.

4. More or less harmless animals living in human settlements or houses as regular or occasional winter guests

Several garden-dwellers enter houses and are recorded more because they are large or visible than because they cause problems for residents. They usually only enter houses to find a place to spend the winter or hide. Six of these, belonging to insects, spiders and crustaceans, will be mentioned here (Fig. 12).

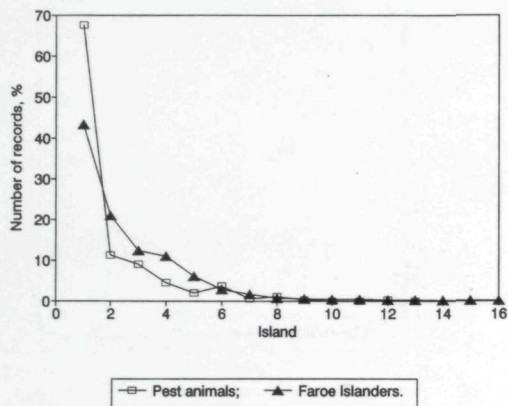


Fig. 16. Distribution of population and delivered specimens according to island. Streymoy=1; Eysturoy=2; Suðuroy=3; Borðoy=4; Vágoy=5; Sandoy=6; Fugloy=7; Viðoy=8; Nólsoy=9; Kalsoy=10; Kunoy=11; Skúvoy=12; Svínøy=13; Hestur=14; Mykines=15; Dímun=16.

Mynd 16. Nøgðin av dýrum og fólki býtt eftir oyggj. Streymoy=1; Eysturoy=2; Suðuroy=3; Borðoy=4; Vágoy=5; Sandoy=6; Fugloy=7; Viðoy=8; Nólsoy=9; Kalsoy=10; Kunoy=11; Skúvoy=12; Svínøy=13; Hestur=14; Mykines=15; Dímun=16.

In May and June the clover mite, *Bryobia praetiosa* (6 records, 1.7%) are found in the window frames facing lawns. These plant-eating mites hatch in spring when the temperature exceeds 7°C for longer periods. If the lawn grows close to the wall of the house they crawl from the lawn directly to hiding places in cracks in the wall and can then enter houses through the window frames. These small reddish mites are pretty and harmless and will soon disappear again in the dry indoor climate.

Another common and highly seasonal invader is green lacewing, *Chrysopa carnea* with 11 records (3.1%) found sitting on

inside window-panes from September to November. It is a beautiful, harmless green insect of 1.5-2 cm's length with large bright wings and large, shiny gold eyes (Fig. 13). They are looking for a place to spend the winter and enter the houses for this purpose.

A very unpopular and also highly seasonal insect is the common earwig *Forficula auricularia* (8 records, 2.2%). In some years, as for instance in 1992, with favourable weather conditions and a large number of offspring they occur indoors in large numbers in August, with a few records around July and September (Fig. 12). The earwig is an omnivorous nocturnal insect. Older houses with turf roofs have a greater risk of being overrun by earwigs in the autumn. They are generally harmless, but are able to bite when squeezed.

The last seasonally occurring insect to be mentioned here is the largest member of the Faroese insect fauna, the Carabid beetle *Carabus problematicus* (9 records, 2.5%). It is a 3-4 cm long, shiny black, fast-moving insect with long legs (Fig. 12). It is active at night and prefers moist places. In some years, as for instance in 1992, it has been found regularly on the ground floor from August to October, when it was looking for a place to spend the winter. Later in January it is found dead, dried out in the heated houses. This beetle is widely distributed in the Faroes, preferring the *Calluna*-heaths (Bengtson, 1981; 1882) and it belongs to the fauna of pre-Norse settlement times (Buckland, 1988; 1992), having possibly arrived as a post-glacial immigrant (Enckell, 1987).

The woodlice, *Oniscoidea* species, which are in fact crustaceans, show quite different occurrence patterns. They are found year-round on the ground floor and indicate that it is moist (9 records, 2.5%). Closely related species live in washed up seaweed, where they provide food for the wintering birds.

A very sporadically occurring insect is the black vine weevil, *Otiorrhynchus sulcatus*. It is ½-1 cm long, having brownly black wings with tiny yellowish spots. It enters houses with pot plants (7 records, 2.0%), is harmless and usually occurs in small numbers.

The *Aracnidae* groups: the harvestmen, *Opiliones* and the spiders *Araneae*, also occur in some cases, all 4 records (1.1%) occurred from March to September.

Results – General remarks

Number of records per year. Pest advice and identification is a free service given by the Museum of Natural History. Over the years, an increasing number of specimens have been brought to the Museum, with a peak of 113 in 1992 (Fig. 14). With a total Faroese population of 46,741 (9 March 1993), the number of inquiries per habitant is, 0.003 (0.3%), which is surprisingly the same number as in Denmark, where the Danish Pest Infestation Laboratory treats 15,000 inquiries a year in a population of 5 million Danes.

Island distribution. Faroese Islanders live in either the capital, Tórshavn, or towns and smaller villages, in all about 110 settlements on 17 different islands. Since the

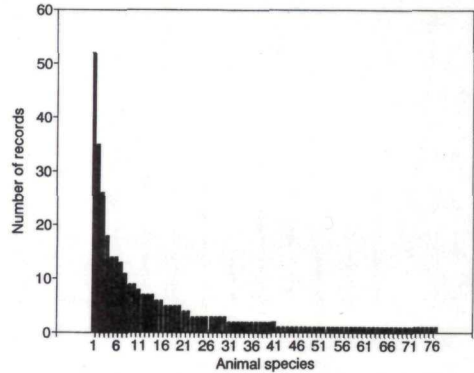


Fig. 17. Total number of specimens distributed according to species. The wood-boring beetle (N=52); the Australian spider beetle (N=35); the dark flour beetle (N=26); the bird flea (N=14); the silverfish (N=14); the book-lice (N=13); the green lacewing (N=11).

Mynd 17. Nøgðin av dýrum býtt eftir slagi. Fýrur, (N=52); tjóvaklukka, (N=35); tjørklukka, (N=26); staraloppa, (N=14); silvurskottur, (N=14); dustlýs, (N=13); gulleiga, (N=11).



Fig. 18. *Sirex gigas*, a wasp laying eggs in newly felled timber. Total length: 50-60 mm.

Mynd 18. *Sirex gigas*, vespa, ið verpur í nýfeld trø. Longd: 50-60 mm.

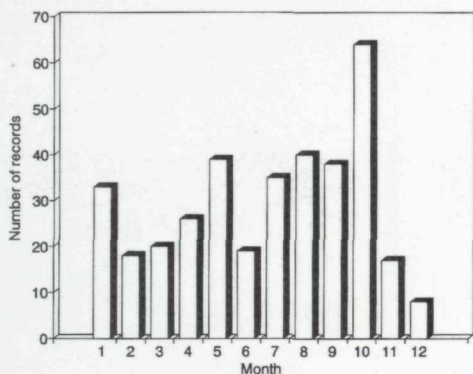


Fig. 19. Monthly distribution of species brought to the Museum of Natural History, Tórshavn, on average 30.

Mynd 19. Nøgðin av dýrum skrásett á Náttúrugripasavninum, í miðal 30 um mánaðin.

capital, Tórshavn, contains a third of the total population, it is to be expected that it also has the largest number of pests recorded (see Fig. 15, where no. 1=Tórshavn has by far the most records (177= 49.6%)). When the percentage of inquiries on pests is related to the percentage of Faroe Islanders living on the different islands (Fig 16), the two curves follow each other closely. The only exception concerns no.1 = Streymoy, with the capital, where the percentage of pests exceeds the percentage of Islanders. There are two reasons for this: firstly, all supplies transported by ship initially come to Tórshavn and secondly, the fact that the Museum is situated in Tórshavn, close to the finder.

Number of records per pest. In all, at least 77 different pest species have been recorded, 63 of which fewer than 5 times since

1983 (Fig. 17). The species most frequently delivered to the Museum is the wood-boring beetle, *Anobium punctatum* with 52 (14.9%) records, followed by the Australian spider beetle, *Ptinus tectus* (35 or 9.9%), and the dark flour beetle, *Tribolium destructor* (26 or 7.4%). It appears that many different species occasionally arrive with imported supplies, but they are unable to establish themselves on the Faroe Islands.

As an example can be mentioned *Sirex* and its parasite, *Rhyssa* (Fig. 18). The habitat of *Sirex* is freshly felled timber. The Faroese production of timber is sporadic and the chance of importing timber containing these Hymenopteran wasps is small. This will result in only a few records. Nevertheless, in the late 1980s, when a lot of housing construction took place, *Sirex* was brought to the Museum 5 times and its parasite 3 times.

Number of animals throughout the year

A total of 357 specimens has been treated, on average 30 specimens per month ranging from 8 in December to 64 in October (Fig. 19). This annual pattern has several components. First of all, different species have different seasonal rhythms. The season in which adult insects fly, mate, lay eggs and find a place to spend the winter will also be the peak period in which they enter houses. Moreover, the seasonal activity of humans will also influence the likelihood of discovering insects, for instance when cleaning the house after Christmas, or when cleaning the small sheds before the freshly slaughtered lamb is hung to wind-dry in October.

Name of animal	The Faroe Islands	Denmark
	Frequency of inquiries	
Common earwig	August	July
Spider beetle	August and October	July and October
Wood-boring beetle (adults)	July	May-August
Book-lice	around the year	October-November
Silverfish	around the year	April-August
Dark flour beetle	around the year	September-January
Fungus beetles	October-April	June-October

TABLE 1. Differences between the Faroe Islands and Denmark in the occurrence of various pest species.
TALVA 1. Tíðin tá skadadýr verða sædd í Føroyum og í Danmark.

Differences between pest fauna in the Faroe Islands and Denmark

Some differences between the Faroes and Denmark in the seasonal occurrence of pest fauna are evident (Table 1). Two things are striking: firstly, that some species have their peak season in the Faroes about one month later than in Denmark (earwig, spider beetle, wood-boring beetle); and secondly that other species with a peak season in Denmark have none in the Faroes (book-lice, silverfish, dark flour beetle). The most probable explanation is the small number of records in the Faroes compared with Denmark. Nevertheless, the distribution of records could also change due to the oceanic climate in the Faroes, which results in the later development of the larvae in the summertime, but better survival possibilities in the mild winters.

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Dorete Bloch
Museum of Natural History
Fr-100 Tórshavn
Faroe Islands

Henri Mourier
Statens Skadedyrlaboratorium
Skovbrynet 14
DK-2800 Lyngby
Denmark