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Statistics of Duck Hunting in Denmark
1966 - 1976

by
ANDERS HOLM JOENSEN

Med et dansk resumé: Statistikker vedrørende andejagten
i Danmark 1966-1976

Резюме на русском языке
Статистики по охоте на уток в Дании 1966-1977

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Introduction

The present report contains statistical information on the kill of ducks by hunters in Denmark during the ten year period 1966 – 1976. Part of the material was published previously together with an analysis of the overall occurrence of ducks in Denmark and its surrounding waters (JOENSEN 1974a). Since much general and conclusive information has thus already been given, most of the information in the present report is contained in tables and diagrams, and only fairly brief comments are included.

The following aspects of the Danish duck kill are treated in the present report:

- 1) The size of the annual kill of different species, covering ten years (1966/67 – 1975/76) for *Anas platyrhynchos*, *Somateria mollissima* and other diving ducks, and covering seven years (1969/70 – 1975/76) for dabbling ducks other than *Anas platyrhynchos*.
- 2) The monthly distribution of the kill of different species during eight years (1968/69 – 1975/76).

Period	Species
16 Aug. – 29 Feb.	<i>Aythya ferina</i>
16 Aug. – 31 Dec.	Dabbling ducks: <i>Anas platyrhynchos</i> , <i>A. crecca</i> , <i>A. querquedula</i> , <i>A. acuta</i> , <i>A. penelope</i> and <i>A. clypeata</i> .
1 Oct. – 29 Feb.	Diving ducks: <i>Aythya fuligula</i> , <i>A. marila</i> , <i>Clangula hyemalis</i> , <i>Melanitta nigra</i> , <i>M. fusca</i> , <i>Somateria mollissima</i> , <i>Bucephala clangula</i> , <i>Mergus serrator</i> and <i>M. merganser</i> .

Table 1. Open seasons for different species of duck in Denmark, according to the Game Act of 1967. Before 1967 *Anas strepera* and *Mergus albellus* also had open seasons.

3) The age- and sex-composition among bagged ducks, covering eight years (1968/69–1975/76) for diving ducks, and covering six years (1970/71 – 1975/76) for dabbling ducks other than *Anas platyrhynchos*. The latter was not included in this survey.

The Game Act of 1967 permits shooting of sixteen duck species in Denmark (Table 1). There is no bag-limit on any game in Denmark. Shooting rights on land belong to the landowner, and in freshwater normally to the adjacent landowners. Landowners may let the shooting rights. Salt water areas are in general open to all Danish hunters, and shooting from motorboats with a maximum speed of ten knots is legitimate during the period 1. Oct. – 29. Feb. Duck flighting is legitimate from 1½ hours before sunrise to 1½ hours (in December 1 hour) after sunset. Killed game can be sold during

the open season. All hunters must possess a general shooting licence valid for one year.

Fig. 1 shows the division of Denmark and its surrounding waters into counties and larger regions.

The author is indebted to Mr. EBBE BØGEBJERG HANSEN, who took part in the investigations, and in particular for his assistance in ageing and sexing killed ducks. Thanks are also due to Mrs. SUSANNE LYKKE-HANSEN and Mrs. ELSE-MARIE NIELSEN, who did most of the work of compiling data through questionnaire surveys to hunters. The author also thanks the game firm MØLLER & MELGAARD (Copenhagen) for giving access to data illustrating the monthly distribution of the kill of the different duck species. This firm, together with the game firms ANDERSEN & SCHRØDER (Copenhagen), BARTELS EFTF. (Århus) and CENTRUMFISK (Svendborg) are thanked for facilitating the study of age- and sex-composition among killed ducks, which they had obtained from hunters. The Game Biology Station also thanks the several thousand hunters, who through their replies to the questionnaire survey concerning the species composition of their bag, made this study possible.

The duck kill survey

MATERIAL AND METHODS

The official bag record

All hunters must possess a general shooting licence, and on its annual renewal provide information on the size of their bag of each spe-

cies (or group of species) in each county (STRANDGAARD 1964, 1972, JOENSEN 1974a). Since 1941/42 when the official bag record was initiated, the method of compiling data and calculating

Year	<i>Anas platyrhynchos</i>		Other dabbling ducks		<i>Somateria mollissima</i>		Other diving ducks		Total	
	Ducks	Hunt.	Ducks	Hunt.	Ducks	Hunt.	Ducks	Hunt.	Ducks	Hunt.
1966/67	359		158		127		101		745	
1967/68	405		173		124		124		826	
1968/69	419	56	141	16	179	12	129	10	868	64
1969/70	403	53	140	15	132	10	140	10	815	60
1970/71	334	49	154	16	116	10	118	10	722	57
1971/72	357	49	136	15	140	10	122	9	755	56
1972/73	368	48	128	14	138	10	112	10	746	55
1973/74	399	54	142	18	161	13	111	12	813	64
1974/75	326	50	144	18	147	13	92	11	709	61
1975/76	380	52	158	19	182	14	97	11	817	63
Average	375	51	147	16	145	12	115	10	781	60

Table 2. The total kill (thousands) of each of four categories of duck in ten seasons, and the number of hunters (thousands) bagging each category over eight seasons. (Data from the official bag-record).

total kills has undergone several changes and improvements. From 1970 all data have been subject to automatic data processing at the Game Biology Station.

In the questionnaire of the official bag record used during the period considered here, ducks have been divided into four categories, viz. 1) *Anas platyrhynchos*, 2) »Other dabbling ducks«, 3) *Somateria mollissima*, and 4) »Other diving ducks«. For the two most important species the official bag record thus provides direct information on the annual kill in each county. For the two aggregate categories however, the share of each species of the total kill was evaluated through supplementary surveys described below.

Table 2 gives the size of the annual kill of the four categories of duck during ten shooting seasons (1966/67–1975/76) according to the official bag record, and in addition for the eight last seasons also the number of hunters, who reported bags of each category.

Species composition among "other diving ducks"

The species composition and the geographical distribution of the kill of »other diving ducks« (nine species, see Table 1) has been studied for ten years (1966/67–1975/76) through a questionnaire survey to hunters who had reported bags of this category to the official bag record. The procedure of collecting data, calculating kills, and evaluating the statistical aspects have been described by JOENSEN 1974a (p. 36–43). During the first years of the survey the geographical

unit used was the police-district (62 units). This was necessary because of considerable variation in reply rates combined with great differences in species composition between neighbouring police-districts. The species composition in counties was obtained by addition of the results for the police-districts contained in each county. By using the police-district of the hunters' domicile as a basis (and not the actual area of the kill), an error concerning the detailed geographical distribution of the kill was introduced, which led to an over-estimation of kills around some of the larger cities.

Geographical differences in reply rates have however gradually diminished, and from 1973/74 the calculation could be based on the county as a geographical unit (county of the kill), thus eliminating errors connected with the geographical distribution of the kill, and also involving a much simpler calculation procedure.

Table 3 gives information on the questionnaire survey concerning the species composition of »other diving ducks«. The survey comprised half of those hunters, who had reported more than ten »other diving ducks« bagged to the official bag record. About three-quarters of the hunters supplied adequate information, and the sample (number of ducks on which information on species was received) comprised 20–30% of the total kill of »other diving ducks«, being generally a few percent lower for Jutland than for the Islands. The representativeness of the material was discussed by JOENSEN (1974a p. 39–43).

Year	No. questionnaires mailed	Hunters	Sample Ducks	% of total kill
1966/67	792	617	17429	24
1967/68	1203	949	25060	20
1968/69	1392	986	32245	25
1969/70	1411	957	32393	23
1970/71	1608	1139	31605	27
1971/72	1479	1080	33062	27
1972/73	1717	1158	32617	30
1973/74	1300	1030	24606	22
1974/75	1122	928	22553	24
1975/76	1195	990	26775	28

Table 3. Data on the questionnaire survey concerning the species composition among »other diving ducks«, 1966/67 – 1975/76. See text page 4 and JOENSEN 1974a page 38–43.

Table 5 gives the estimated kill of each species (and the 95 % confidence limits) for the Islands, Jutland and the whole country. With the exception of the first year (1966/67, see JOENSEN 1974a p. 44) estimates are comparable for all years treated.

Species composition among "other dabbling ducks"

For four years (1969/70–1972/73) the calculation of the species composition and geographical distribution of the kill of "other dabbling ducks" (see Table 1) was based on statistics of the game firm MØLLER & MELGAARD, Copenhagen, which receives game from hunters all over the country (see JOENSEN 1974a p. 45–46). Since samples from some parts of the country were rather small, implying rather inaccurate estimates, it was decided from 1973/74 to conduct a questionnaire survey to hunters on the same lines as for "other diving ducks". For 1973/74 estimates resulting from both types of survey (based on game dealer statistics and on the questionnaire survey to hunters respectively) were compared. Very good agreement was found between the two sets of estimates, thus allowing comparison between all the seven years covered, as far as estimates for larger regions are concerned (the Islands, Jutland, and the whole country). – However for two species *Anas clypeata* and *Anas querquedula* there are limitations. *Anas*

Year	No. questionnaires mailed	Hunters	Sample Ducks	% of total kill
1969/70	–	–	5921	4
1970/71	–	–	9826	6
1971/72	–	–	5309	4
1972/73	–	–	6331	5
1973/74	781	642	14368	10
1974/75	952	812	19945	14
1975/76	1094	939	24166	15

Table 4. Data on surveys concerning the species composition among »other dabbling ducks«, during 1969/70 – 1972/73 based on files of a game firm (see JOENSEN 1974a page 45–46) and during 1973/74 – 1975/76 based on a questionnaire survey to hunters (see page 5).

clypeata: in the survey based on game dealer statistics the estimated kill is 10–20 % higher than estimates obtained through the questionnaire survey, the latter method being considered more reliable. *Anas querquedula*: in the list of the game firm no distinction was made between

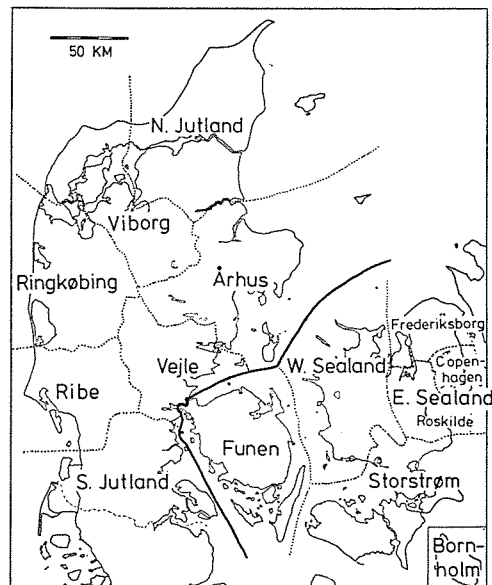


Fig. 1. The division of Denmark into counties and larger regions, the Islands and Jutland.

Anas crecca and *Anas querquedula*, and subsequently for the years 1969/70–1972/73 it was not possible to estimate the kill of the latter species. The two species were distinguished between in the questionnaire survey, but since it is likely that many hunters have not always made the distinction themselves, estimates for the minority species *Anas querquedula* are probably less accurate than those of other species.

Table 4 gives information on the surveys concerning "other dabbling ducks". During the first four years (1969/70–1972/73) when the calculation was based on game dealer statistics, annual samples comprised 4–6% of the total kill

of "other dabbling ducks". The questionnaire survey to hunters during 1973/74–1975/76 comprised a proportion of those hunters, who had reported more than ten "other dabbling ducks" bagged to the official bag record. 85% of these hunters supplied adequate information, and the sample (number of ducks on which information on species was received) comprised 10–15% of the total kill of "other dabbling ducks". During the whole period samples were slightly larger in the Islands than in Jutland.

Table 6 gives the estimated kill of each species (and the 95% confidence limits) for the Islands, Jutland and the whole country.

SIZE AND GEOGRAPHICAL DISTRIBUTION OF THE DUCK KILL

In a previous report (JOENSEN 1974a) several aspects concerning the Danish duck kill in general and the kill of the different species was described and discussed in relation to the populations occurring in Denmark and its surrounding waters. Therefore some of the main quantitative information contained in the tables of the present report is only briefly summarized in this chapter.

Size of the total duck kill

According to the official bag record (Table 2) the total annual bag of ducks during ten years (1966/67–1975/76) varied from 709,000 to 868,000 (average 781,000), and approximately 60,000 hunters killed ducks every year, comprising a little less than half of all hunting-licence holders. The kill reported to the official bag record by hunters normally comprises only the retrieved bag. The size of the additional loss of non-retrieved killed or crippled birds has not been studied in Denmark, but if it is tentatively assumed to be of the same order of magnitude as in North America (25% of the bag, CRISSEY 1970), the total annual duck mortality caused directly by shooting in Denmark can be estimated as roughly one million birds.

Annual variations and trends in the size of the kill

During the ten-year period considered here, the kill of all species taken together shows relatively little annual variation and no obvious trend. For several individual species this is also true: *Anas platyrhynchos*, *Anas crecca*, *Anas penelope*, *Anas acuta*, *Aythya ferina*, *Clangula hyemalis*, and *Mergus serrator*. An apparent downward trend in the annual kill of *Anas clypeata* is probably due to over-estimation of the kill in the first years of the survey (see p. 5).

The following species show either more pronounced annual variation in the total kill or more or less evident trends (and sometimes both) over the period covered in the present report.

Somateria mollissima: Over the last 25 years for which data is available, the annual kill has approximately doubled (JOENSEN 1974a p. 109, 1974b), and the increase appears also to have continued in later years. Annual variations in the size of the kill are also very pronounced. The breeding population has been steadily increasing over several decades, not only in Denmark, but also in the Baltic Sea,

from where most of the birds wintering in Danish waters are recruited.

Aythya fuligula and *Mergus merganser*: The annual kill shows some variation, and smaller numbers were bagged in the last four years of the period considered as compared to the five preceding years. Populations wintering in Danish waters are largest for both species in severe winters (JOENSEN 1974a p. 90, 117), and winters in the last part of the period were relatively mild.

Aythya marila: In eight of ten years treated, the kill was between 5,500 and 7,500 birds. In 1969/70 the kill was considerably larger (13,100 birds), and in 1974/75 much smaller than normal (3,600). The exceptionally large kill occurred in a year when winter populations in Danish waters were very large and the proportion of juveniles was very high.

Melanitta nigra and *Melanitta fusca*: Over the ten years investigated the kill of both species has been decreasing, viz. reduced by nearly half of its original size. The most obvious explanations are a) that due to increased disturbance in coastal waters the birds tend to occur further out at sea, where they are more difficult to hunt, and b) that they have become less attractive to hunters. It cannot however be ruled out that the downward trend in the annual kill also reflects an annual decrease in the populations wintering in Danish waters, or even in the total populations of the two *Melanitta* species. Very little exact knowledge is available on the size and distribution of populations in NW European waters, and hitherto no adequate monitoring of their populations has been undertaken. At the same time it is known that they have suffered quite heavy (and possible under-emphasized) losses in connection with several oil pollution incidents in later years (JOENSEN & HANSEN 1977).

Bucephala clangula: During the first eight years of the period considered in the present report the annual kill showed a steady increase, but in the two last years numbers fell again to the average level for the whole period.

Species composition and geographical distribution

Of the sixteen species of duck hunted in Denmark (Table 7) *Anas platyrhynchos* is by far the most important accounting for about half of the total duck kill, in the whole country and in every county. The kill of this species comprises wild birds of Danish and foreign origin, and a large proportion of hand-reared birds. The second most important species is *Somateria mollissima*, which accounts for one fifth of the total Danish duck kill. *Anas crecca* (10%) and *Anas penelope* (6%) rank number three and four. These four most important species account for 85% of the total kill of ducks in Denmark. Although the remaining twelve species thus comprise relatively small proportions of the total kill, several of them are locally quite important, the most evident examples being *Clangula hyemalis* on Bornholm (one-quarter of the local duck kill as against 1.5% in the whole country), and *Bucephala clangula* in the Limfjord (10% of the total duck kill in Viborg County as against 3.4% in the whole country).

The total kill in the Islands is slightly larger than in Jutland. For several species the kill is fairly uniformly distributed over the whole country, but for some species limited regions or even single counties account for a relatively large proportion of their total kill, as outlined below:

Somateria mollissima, *Melanitta nigra* and *Melanitta fusca*: More than half are bagged in the Southern Kattegat.

Anas penelope: Two-thirds are bagged in North and West Jutland.

Bucephala clangula: Nearly half are bagged in the Limfjord and in Ringkøbing Fjord.

Aythya fuligula: Half are bagged in E. Sealand and Storstrøm Counties.

Clangula hyemalis: About 80% are bagged in the Baltic Sea and immediately adjacent waters.

Anas acuta: One third are bagged in Ringkøbing County.

Mergus serrator: One third are bagged in the Limfjord.

Aythya marila: Nearly half are bagged in the Lillebælt and the South Funen Archipelago.

Aythya ferina: One third are bagged in Storstrøm County.

Monthly kill index

The monthly distribution of the kill of the different duck species was illustrated by data from the files of the game firm MØLLER & MELGAARD, Copenhagen, which receives killed ducks from all parts of the country. Information on the five year period 1968/69 – 1972/73 was presented earlier (JOENSEN 1974a), and the present report includes the succeeding three years to illustrate the monthly distribution of the kill in altogether eight years.

Among the sources of error which may influence the representativeness of the sample, and which were discussed in more detail by JOENSEN (1974a p. 51), one is particularly important: Very early in the shooting season birds become tainted and lose their value within a few days, and it is reasonable to assume that many hunters are reluctant to send shot ducks to game dealers particularly in August and September. Consequently ducks bagged in the early part of the shooting season are probably under-represented in the sample (dabbling ducks and *Aythya ferina*).

Table 8 gives the annual number of each species of duck received by the game firm and the percentage monthly distribution. No data were available for three species: 1) *Anas querquedula*: The few birds received by the game firm were

filed as *Anas crecca*. – 2) *Mergus serrator* and *Mergus merganser*: The firm made no distinction between these species in the files. For the years 1968/69 – 1972/73 the monthly distribution of the kill of the two *Mergus* species could be roughly estimated by combining data from game firm files with data on birds examined by the author (JOENSEN 1974a p. 52–53), but in later years samples were too small for this approach.

The open season for ducks in Denmark is 7½ months, but only *Aythya ferina* can legitimately be hunted during the entire period from 16. August to 29. February. Dabbling ducks are hunted during 4½ months, and diving ducks (other than *Aythya ferina*) during 5 months.

Table 9 shows the approximate monthly distribution of the kill of the four main categories of duck; the months of September and October together account for half of the total Danish duck kill.

For dabbling ducks September is the most important month accounting for one third of the kill, as against one tenth in December. In particular for *Anas clypeata* (and without doubt also *Anas querquedula*) a large proportion of the bag is taken very early in the season.

For diving ducks October is the most important month, accounting for nearly

one third of the kill, and again December is the least important with only one tenth of the total kill (ignoring the few hundred *Aythya ferina* killed in August-September). For the following diving ducks the kill is rather uniformly distributed over the whole shooting season: *Aythya ferina*, *Bucephala clangula*, *Melanitta nigra* and *Melanitta fusca*. Of four species of diving

ducks more than three-quarters of the total kill is taken in January-February: *Aythya fuligula*, *Aythya marila*, *Clangula hyemalis* and *Mergus merganser*. A large proportion of *Mergus serrator* is bagged in October. In some years the kill of *Somateria mollissima* is fairly uniformly distributed, while in other years about half of the total bag is taken in October.

Age- and sex-composition among bagged ducks

The age- and sex-composition of bagged diving ducks was studied during eight years (1968/69 - 1975/76), and that of four species of dabbling ducks during six years (1970/71 - 1975/76). *Anas platyrhynchos* and *Anas querquedula* were not included in the study. The methods and problems connected with the interpretation of such data have been described by JOENSEN 1974a (p. 54-62, 169). Most material consisted of whole birds examined at two game firms in Copenhagen, and additional wings of diving ducks were obtained from two game firms in Funen and in E. Jutland. Material was collected during the months October-February, while the survey did not cover the first 1½ months of the shooting season of dabbling ducks and of *Aythya ferina*.

The intention was to place each bird into one of four categories, viz. adult male, adult female, juvenile male, or juvenile female (juvenile = less than one year old). Since time was often a factor limiting the thoroughness with which the examinations could be conducted, such a detailed classification could not always be made, particularly in species for which accurate determination requires rather careful examination. In such cases the ageing was given higher priority than sexing, and the present report only includes samples in which all birds were aged.

Table 10 gives the composition of materials examined of each species in each year. With reference to the above mentioned limitations in sexing, it should be emphasized that in several columns the sum of juv. ♀ and juv. ♂ is less than the total number of juveniles (and in the four dabbling ducks the same is the case with adult birds in some years). In species samples of which only an insignificant proportion of the birds were actually sexed, the sex-composition has been entirely omitted (in dabbling ducks 1970/71, and in juvenile *Clangula hyemalis*, *Melanitta nigra* and *Melanitta fusca* in all years).

In the previous report covering the investigations up to and including 1972/73, the age- and sex-composition was described and discussed in some detail for each species. Samples of several species have been quite small in later years and give little background for further comments. Only for eight species have annual samples almost consistently exceeded one hundred birds during the whole period of investigation; in the diagram Fig. 2 the annual juvenile percentage of these eight species from birds examined is shown. It illustrates that 1) in some species there is relatively little annual variation in the juvenile percentage among bagged birds (*Anas crecca*, *Anas penelope*, *Bucephala clangula*, and *Melanitta nigra*), while in other species there are evident variations

from year to year (*Somateria mollissima*, *Aythya fuligula*, and particularly in *Clangula hyemalis* and *Melanitta fusca*). 2) In *Somateria mollissima* and *Clangula hyemalis* there is a correlation between years with high juvenile percentages and peaks

in the size of the annual kill, although in the latter species such peak kills are only slightly higher than the average annual kill. In other species (*Anas crecca*, *Aythya fuligula* and *Bucephala clangula*) there is apparently no such correlation.

Conclusion

For many species of waterfowl and in particular ducks, hunting is the most important single mortality factor. Therefore quantitative data on the size and distribution of the kill are quite essential for management of their populations. Obviously it is necessary to obtain representative information from a large proportion of or preferably all the countries, which lie on the flyway and which utilize the populations through hunting. In recent years European waterfowl-kill statistics have improved considerably as a result of national research schemes encouraged by the International Waterfowl Research Bureau. Several countries are today able, on the basis of different types of survey, to produce fairly accurate estimates for the size of kills of individual species or groups of species. Some countries have however not yet developed adequate kill statistics, including some countries in which apparently large numbers of waterfowl are killed. It is to be hoped that progress in this field will continue and eventually lead to the establishment of routine surveys in all countries in Europe and adjacent areas. It is recommended in this connection that the ultimate objective should be to establish surveys which in

principle are based on annual reports from all hunters, similar to the official Danish bag record.

The present report includes data obtained over several years on the age- and sex-composition of bags of most species of duck hunted in Denmark. Some valuable information on the variations in annual production levels has been obtained, and in connection with studies on duck populations and hunting, the value of handling and examining large numbers of ducks should not be under-emphasized. It must be admitted however that although total numbers of ducks examined in the Danish study may appear large, it has for several species been impossible to obtain satisfactory samples consistently. Several problems connected with the interpretation of the data, as well as the fact that material was obtained in such a small area within the entire flyway, makes it difficult to go very far in drawing conclusions from the data obtained. Indeed the use of bag composition data in population management programmes requires quite intensive international co-ordination as regards both methods and interpretation of results.

Dansk resumé

Statistikker vedrørende andejagten i Danmark 1966-1976

Rapporten er en fortsættelse af en tidligere afhandling (JOENSEN 1974a), som behandlede andejagten i Danmark i årene 1966-1973. Det frem-

lagte materiale belyser følgende kvantitative forhold vedrørende andejagten i Danmark:

1) Størrelsen af det årlige jagtudbytte af de

forskellige arter: for gråand, ederflg og andre dykænder gennem ti år (1966/67–1975/76), for svømmeænder eksklusiv gråand gennem syv år (1969/70–1975/76). Oplysningerne er dels baseret på den officielle vildtudbyttestatistik, dels på supplerende undersøgelser, først og fremmest spørgebrevsundersøgelser til et stort antal jægere.

2) Den månedlige fordeling af jagtudbyttet af de enkelte arter af ænder gennem otte år, belyst ved indhandlingsstatistikker i et større vildtfirma.

3) Alders- og kønssammensætningen blandt nedlagte ænder, dog ikke gråand. For dykænder gennem otte år (1968/69–1975/76), for svømmeænder gennem seks år (1970/71–1975/76). Materialet er tilvejebragt gennem vildtfirmaer i København og provinsen.

En række spørgsmål vedrørende metoder, samt mere detaljerede analyser af resultaterne fra undersøgelsens første år blev fremlagt i en tidligere rapport (JOENSEN 1974a). I nærværende rapport

er hovedvægten lagt på en præsentation af materialet i Tabeller, samt diagrammet Fig. 2. Tabellerne viser flg.: *Tablet 1*: Oversigt over jagtbare arter og jagttider. – *Tablet 2*: Årsudbyttet gennem ti år af de fire kategorier af ænder, som figurerer i den officielle vildtudbyttestatistik, samt antallet af jægere, som har nedlagt hver af disse kategorier. – *Tablet 3 og 4*: Oplysninger om spørgebrevsundersøgelser m. v. – *Tablet 5 og 6*: De beregnede årsudbytter af de enkelte arter af dykænder og svømmeænder. – *Tablet 7*: Den geografiske fordeling (amtsvis og landsdelsvis) af udbyttet af de enkelte arter. – *Tablet 8*: Den månedlige fordeling af ænder indhandlet til et vildtfirma, til belysning af jagtudbyttets månedlige fordeling. – *Tablet 9*: Den beregnede månedlige fordeling af jagtudbyttet af de fire vigtigste kategorier af ænder (jvf. vildtudbyttestatistikken), og af alle arter af ænder. – *Tablet 10*: Alders- og kønssammensætningen blandt nedlagte ænder, undersøgt hos vildthandlere.

Резюме на русском языке

Статистики по охоте на уток в Дании 1966-1976

Настоящий отчет является продолжением предшествовавшей статьи (JOENSEN 1974 a), в которой обсуждалась охота на уток в Дании с 1966 по 1973 г. Представленный материал разъясняет следующие количественные соотношения, касающиеся охоты на уток в Дании:

1) Численность годовой охотничьей добычи по отдельным видам: *Anas platyrhynchos*, *Somateria mollissima* и других нырковых уток в течение десяти лет (с 1966/67 по 1975/76), настоящих уток, исключая *Anas platyrhynchos*, в течение семи лет (с 1969/70 по 1975/76). Данные отчасти основаны на официальной статистике охотничьей добычи, а отчасти на дополнительных исследованиях, прежде всего на анкетах, высланных большому числу охотников.

2) Распределение по месяцам охотничьей добычи отдельных видов уток в течение восьми лет, выясненное при помощи статистики покупок крупной фирмы, торгующей дичью.

3) Состав по возрасту и полу убитых уток, однако за исключением *Anas platyrhynchos*: для нырковых уток в течение восьми лет (с 1968/69 по 1975/76), для настоящих уток в течение шести лет (с 1970/71 по 1975/76). Материал получен с помощью торгующих дичью фирм в Копенгагене и провинциальных городах.

Ряд вопросов, касающихся способов, а также более подробные анализы результатов исследований за первые годы были представлены в предыдущей статье (JOENSEN 1974 a). В настоящем отчете большее значение придано представлению материала в виде таблиц и диаграммы фиг. 2. Таблицы указывают следующее: Таблица 1: Обзор видов, на которые ведется охота, и периодов охоты. – Таблица 2: Годовая добыча за десять лет четырех категорий уток, указываемых в официальной статистике по охотничьей добыче, и число охотников, убивавших уток каждой из этих категорий. – Таблицы 3 и 4: Сведения об опросах при помощи анкет и т. п. – Таблицы 5 и 6: Вычисленные годовые добычи отдельных видов нырковых и настоящих уток. – Таблица 7: Географическое распределение (по районам и областям страны) добычи отдельных видов. – Таблица 8: Распределение по месяцам уток, закупленных торгующей дичью фирмой, для выяснения распределения охотничьей добычи по месяцам. – Таблица 9: Вычисленное распределение по месяцам охотничьей добычи четырех важнейших категорий уток (по статистике охотничьей добычи), а также всех видов уток. – Таблица 10: Состав по возрасту и полу убитых уток, обследованных торговцами дичью.

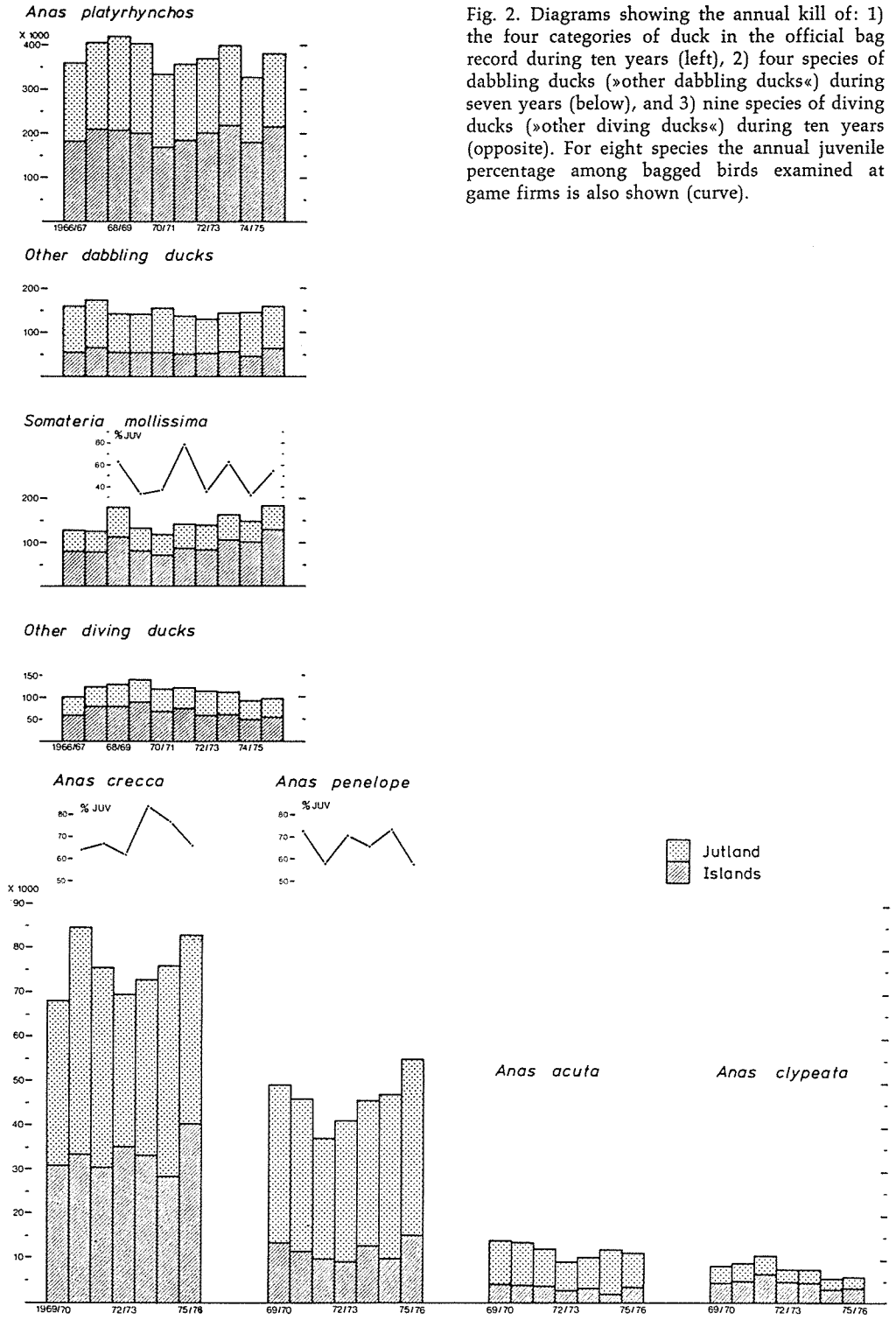
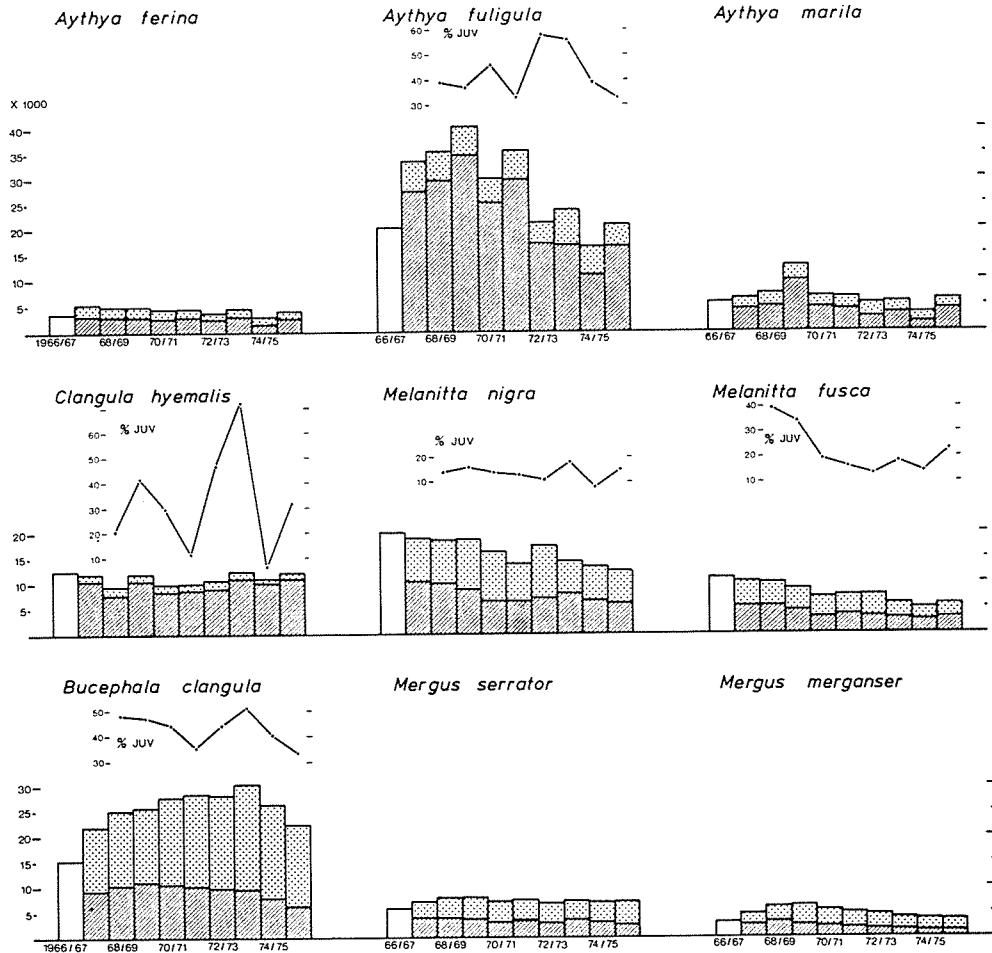


Fig. 2. Diagrams showing the annual kill of: 1) the four categories of duck in the official bag record during ten years (left), 2) four species of dabbling ducks («other dabbling ducks») during seven years (below), and 3) nine species of diving ducks («other diving ducks») during ten years (opposite). For eight species the annual juvenile percentage among bagged birds examined at game firms is also shown (curve).



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		<i>A. ferina</i>	<i>A. fuligula</i>	<i>A. marila</i>	<i>Cl. hyemalis</i>	<i>M. nigra</i>	<i>M. fusca</i>	<i>B. clangula</i>	<i>M. serrator</i>	<i>M. merganser</i>	Other species	Total
1966/67	Total	39	207	57	126	203	112	154	57	29	23	1007
1967/68	Islands	34 ± 2	277 ± 5	44 ± 3	106 ± 4	105 ± 4	55 ± 3	93 ± 4	39 ± 3	24 ± 2	15	791
	Jutland	23 ± 3	60 ± 3	22 ± 2	15 ± 2	85 ± 4	50 ± 3	127 ± 5	33 ± 3	21 ± 2	12	447
	Total	57 ± 3	337 ± 6	65 ± 4	121 ± 4	190 ± 6	104 ± 5	220 ± 6	72 ± 4	46 ± 3	27	1238
1968/69	Islands	32 ± 2	299 ± 5	49 ± 3	79 ± 3	101 ± 3	55 ± 3	104 ± 4	39 ± 2	32 ± 2	12	803
	Jutland	20 ± 2	58 ± 3	25 ± 2	15 ± 2	85 ± 4	48 ± 3	148 ± 4	41 ± 3	28 ± 2	19	487
	Total	52 ± 3	357 ± 6	74 ± 4	95 ± 3	186 ± 5	102 ± 4	252 ± 5	80 ± 4	60 ± 3	31	1290
1969/70	Islands	32 ± 2	349 ± 6	100 ± 4	107 ± 4	89 ± 4	47 ± 3	111 ± 4	37 ± 3	25 ± 2	7	904
	Jutland	21 ± 2	58 ± 4	31 ± 3	13 ± 2	100 ± 4	43 ± 3	146 ± 5	43 ± 3	38 ± 3	5	498
	Total	52 ± 3	407 ± 4	131 ± 5	121 ± 4	189 ± 5	90 ± 4	257 ± 6	80 ± 4	63 ± 4	11	1401
1970/71	Islands	28 ± 2	255 ± 5	46 ± 2	84 ± 3	66 ± 3	34 ± 2	106 ± 4	31 ± 2	21 ± 2	11	682
	Jutland	18 ± 2	47 ± 3	22 ± 2	15 ± 2	98 ± 4	39 ± 3	171 ± 4	42 ± 3	33 ± 2	9	495
	Total	46 ± 3	302 ± 5	68 ± 3	99 ± 3	164 ± 5	73 ± 4	278 ± 5	73 ± 4	54 ± 3	20	1177
1971/72	Islands	31 ± 2	301 ± 5	42 ± 2	86 ± 3	66 ± 3	38 ± 2	102 ± 3	36 ± 2	19 ± 2	18	739
	Jutland	15 ± 2	57 ± 3	23 ± 2	14 ± 2	75 ± 3	39 ± 2	183 ± 4	39 ± 2	30 ± 2	11	485
	Total	47 ± 3	358 ± 6	65 ± 3	100 ± 3	140 ± 4	77 ± 3	285 ± 6	75 ± 3	49 ± 3	29	1224
1972/73	Islands	26 ± 2	174 ± 4	29 ± 2	89 ± 3	72 ± 3	34 ± 2	98 ± 3	30 ± 2	17 ± 2	16	584
	Jutland	13 ± 1	41 ± 2	25 ± 2	17 ± 2	104 ± 4	43 ± 2	185 ± 4	38 ± 2	28 ± 2	9	504
	Total	39 ± 2	215 ± 4	55 ± 3	106 ± 3	176 ± 4	77 ± 3	283 ± 5	68 ± 3	45 ± 3	25	1088
1973/74	Islands	32 ± 2	172 ± 4	36 ± 2	109 ± 3	81 ± 3	32 ± 2	96 ± 4	36 ± 2	15 ± 2	8	617
	Jutland	17 ± 2	68 ± 3	23 ± 2	15 ± 2	62 ± 3	29 ± 2	209 ± 4	38 ± 2	24 ± 2	11	495
	Total	48 ± 3	240 ± 5	58 ± 3	124 ± 4	144 ± 4	60 ± 3	305 ± 6	74 ± 3	39 ± 2	18	1112
1974/75	Islands	16 ± 2	121 ± 3	19 ± 2	100 ± 3	67 ± 3	28 ± 2	79 ± 3	32 ± 2	13 ± 1	8	484
	Jutland	15 ± 2	48 ± 3	17 ± 2	11 ± 1	68 ± 3	24 ± 2	186 ± 4	39 ± 3	24 ± 2	7	438
	Total	31 ± 2	169 ± 4	36 ± 2	110 ± 4	135 ± 4	52 ± 3	265 ± 5	71 ± 3	37 ± 3	15	922
1975/76	Islands	27 ± 2	168 ± 4	44 ± 2	109 ± 3	62 ± 3	33 ± 2	62 ± 3	27 ± 2	13 ± 1	3	549
	Jutland	16 ± 2	44 ± 3	20 ± 2	13 ± 1	64 ± 3	27 ± 2	162 ± 4	46 ± 3	23 ± 2	6	420
	Total	43 ± 3	212 ± 5	64 ± 3	121 ± 4	126 ± 4	60 ± 3	224 ± 5	73 ± 3	36 ± 2	9	969
Mean annual kill												
Denmark total		45	280	67	112	165	81	252	72	46	21	1143
% of total kill of												
»other diving ducks«		4	25	6	10	14	7	22	6	4	2	

Table 5. The estimated kill and 95% confidence-limits ($\times 100$) of each species in the category »other diving ducks« in ten years (1966/67 - 1975/76).

Danish Duck Hunting Statistics 1966-1976

		<i>A. quer- quedula</i>	<i>A. crecca</i>	<i>A. acuta</i>	<i>A. pene- lope</i>	<i>A. clype- ata</i>	Other species	Total
1969/70	Islands	311 ± 12		43 ± 7	136 ± 10	45 ± 7	—	536
	Jutland	370 ± 17		97 ± 11	357 ± 17	39 ± 8	—	864
	Total	682 ± 21		141 ± 13	493 ± 20	84 ± 10	—	1400
1970/71	Islands	336 ± 9		41 ± 5	117 ± 8	50 ± 5	—	544
	Jutland	512 ± 14		96 ± 9	344 ± 13	41 ± 6	—	993
	Total	849 ± 17		137 ± 10	461 ± 15	91 ± 8	—	1537
1971/72	Islands	307 ± 10		39 ± 5	100 ± 8	67 ± 7	—	514
	Jutland	450 ± 18		84 ± 11	273 ± 16	42 ± 9	—	849
	Total	757 ± 21		123 ± 12	373 ± 18	109 ± 12	—	1363
1972/73	Islands	353 ± 9		29 ± 4	94 ± 7	49 ± 6	—	525
	Jutland	344 ± 15		64 ± 8	318 ± 15	27 ± 6	—	753
	Total	696 ± 18		93 ± 9	412 ± 16	77 ± 8	—	1278
1973/74	Islands	11 ± 2	334 ± 7	34 ± 3	129 ± 6	48 ± 4	10	566
	Jutland	12 ± 2	395 ± 10	70 ± 6	329 ± 10	29 ± 4	21	856
	Total	23 ± 3	729 ± 12	104 ± 7	458 ± 11	77 ± 5	30	1422
1974/75	Islands	6 ± 1	285 ± 5	21 ± 2	100 ± 5	32 ± 3	6	449
	Jutland	12 ± 2	476 ± 9	101 ± 5	371 ± 8	24 ± 3	7	992
	Total	18 ± 2	761 ± 10	122 ± 6	471 ± 9	56 ± 4	13	1441
1975/76	Islands	6 ± 1	405 ± 6	37 ± 3	153 ± 5	35 ± 3	2	638
	Jutland	8 ± 1	423 ± 8	76 ± 4	398 ± 8	26 ± 3	9	939
	Total	14 ± 2	828 ± 10	113 ± 5	551 ± 9	60 ± 4	11	1577
Mean annual kill Denmark total		18	757	119	460	79	18	1431
% of total kill of »other dabbling ducks«		1	52	8	32	5	1	

Table 6. The estimated kill and 95% confidence-limits ($\times 100$) of each species in the category »other dabbling ducks« in seven years (1969/70 - 1975/76).

Table 7 (next page). Geographical distribution of the kill of each species of duck in Denmark, based on average values for three years (1973/74 - 1975/76) for which the most accurate data is available, although not characteristic in all respects of the whole period considered in the present report (see page 7). In the left hand column the sixteen species are arranged according to their importance in the whole country, and for each species the size of the annual kill and the percentage proportion of the total duck kill are given. - The top column gives the counties and for each of these and the two regions (the Islands and Jutland) the size of the kill and their percentage proportion of the total Danish duck kill. - For each species and county/region the two figures in the table give: The percentage proportion of the total kill of the species bagged in each county/region (top figures), and the percentage proportion of the total duck kill in the county/region of that species (below, in italics).

Table 7 (text page 15)

	Bornholm (8,400 - 1.1 ^o /o)	E. Sealand (84,100 - 10.8 ^o /o)	W. Sealand (86,900 - 11.2 ^o /o)	Storstrøm (105,500 - 13.6 ^o /o)	Funen (138,200 - 17.8 ^o /o)	Islands total (423,000 - 54.5 ^o /o)	S. Jutland (47,700 - 6.2 ^o /o)	Ribe (41,000 - 5.3 ^o /o)	Vejle (30,800 - 4.0 ^o /o)	Ringkøbing (64,900 - 8.4 ^o /o)	Århus (67,500 - 8.7 ^o /o)	Viborg (39,100 - 5.0 ^o /o)	N. Jutland (62,300 - 8.0 ^o /o)	Jutland total (353,400 - 45.5 ^o /o)
1. <i>Anas platyrhynchos</i> (368,500 - 47.5 ^o /o)	1.0	10.0	12.2	14.8	17.2	55.2	6.4	4.1	3.8	7.2	8.7	5.8	8.8	44.8
	45.4	44.0	51.7	51.6	45.9	48.1	49.4	36.3	45.2	41.1	47.3	55.0	52.1	46.7
2. <i>Somateria mollissima</i> (163,100 - 21.0 ^o /o)	1.2	15.5	13.7	10.9	26.6	67.8	4.3	5.2	5.0	0.8	11.1	0.4	5.4	32.2
	22.7	30.1	25.7	16.8	31.4	26.1	14.7	20.7	26.7	2.0	26.8	1.7	14.1	14.9
3. <i>Anas crecca</i> (77,300 - 9.9 ^o /o)	0.5	8.2	11.9	14.3	9.3	44.2	7.6	7.7	1.9	16.3	6.9	7.1	8.2	55.8
	4.3	7.5	10.6	10.5	5.2	8.1	12.4	14.5	4.9	19.4	7.9	14.0	10.1	12.2
4. <i>Anas Penelope</i> (49,300 - 6.4 ^o /o)	0.2	6.4	4.7	5.7	8.8	25.8	11.1	15.5	1.8	18.6	5.6	6.7	14.8	74.2
	1.4	3.7	2.7	2.7	3.1	3.0	11.4	18.6	2.9	14.1	4.1	8.5	11.7	10.4
5. <i>Bucephala clangula</i> (26,500 - 3.4 ^o /o)	0.2	8.7	2.5	8.7	9.9	29.9	4.0	3.6	6.9	21.6	8.8	15.3	9.9	70.1
	0.5	2.7	0.7	2.2	1.9	1.9	2.2	2.3	6.0	8.8	3.5	10.3	4.2	5.2
6. <i>Aythya fuligula</i> (20,700 - 2.7 ^o /o)	0.4	19.9	6.7	30.8	16.6	74.3	4.3	1.0	1.6	5.7	5.5	2.7	4.8	25.7
	0.9	4.9	1.6	6.0	2.5	3.6	1.9	0.5	1.1	1.8	1.7	1.4	1.6	1.5
7. <i>Melanitta nigra</i> (13,500 - 1.7 ^o /o)	0.3	5.8	13.9	7.6	24.4	52.0	1.5	4.5	11.5	5.4	17.2	1.4	6.6	48.0
	0.4	0.9	2.2	1.0	2.4	1.7	0.4	1.5	5.0	1.1	3.4	0.5	1.4	1.8
8. <i>Clangula hyemalis</i> (11,900 - 1.5 ^o /o)	16.3	11.3	7.0	23.6	30.9	89.2	2.2	0.9	2.2	2.4	1.4	0.3	1.4	10.8
	23.1	1.6	1.0	2.7	2.7	2.5	0.6	0.2	0.9	0.4	0.2	0.1	0.3	0.4
9. <i>Anas acuta</i> (11,300 - 1.5 ^o /o)	-	5.4	4.6	9.5	7.6	27.1	15.1	10.3	1.0	32.7	3.3	4.1	6.5	72.9
	-	0.7	0.6	1.0	0.6	0.7	3.6	2.8	0.4	5.7	0.5	1.2	1.2	2.3
10. <i>Mergus serrator</i> (7,300 - 0.9 ^o /o)	0.3	7.1	8.6	10.8	16.7	43.5	5.0	2.3	4.8	8.4	8.2	23.1	4.7	56.5
	0.3	0.6	0.7	0.7	0.9	0.7	0.8	0.4	1.1	0.9	0.9	4.3	0.6	1.2
11. <i>Anas clypeata</i> (6,400 - 0.8 ^o /o)	0.2	11.7	11.5	26.8	9.0	59.2	5.1	3.8	1.3	15.5	4.1	6.3	4.7	40.8
	0.1	0.9	0.9	1.6	0.4	0.9	0.7	0.6	0.3	1.5	0.4	1.0	0.5	0.7
12. <i>Melanitta fusca</i> (5,800 - 0.7 ^o /o)	0.4	8.3	11.7	8.4	25.1	53.9	1.3	2.6	20.8	2.6	14.0	1.7	3.1	46.1
	0.3	0.6	0.8	0.5	1.0	0.7	0.2	0.4	3.9	0.2	1.2	0.3	0.3	0.8
13. <i>Aythya marila</i> (5,300 - 0.7 ^o /o)	0.1	9.9	4.1	13.5	34.7	62.4	5.7	2.1	5.2	7.8	7.5	2.2	7.1	37.6
	0.1	0.6	0.2	0.7	1.3	0.8	0.6	0.3	0.9	0.6	0.6	0.3	0.6	0.6
14. <i>Aythya ferina</i> (4,100 - 0.5 ^o /o)	0.2	8.9	4.4	35.9	12.2	61.5	3.7	1.7	1.3	11.4	6.9	3.6	9.8	38.5
	0.1	0.4	0.2	1.4	0.4	0.6	0.3	0.2	0.2	0.7	0.4	0.4	0.6	0.4
15. <i>Mergus merganser</i> (3,800 - 0.5 ^o /o)	0.4	10.7	5.6	10.9	9.1	36.7	6.9	4.2	5.1	15.6	13.5	8.7	9.2	63.3
	0.2	0.5	0.2	0.4	0.2	0.3	0.5	0.4	0.6	0.9	0.8	0.8	0.6	0.7
16. <i>Anas querquedula</i> (1,800 - 0.2 ^o /o)	0.6	6.5	10.4	14.5	10.8	42.9	9.2	4.2	1.1	18.4	9.5	6.3	8.4	57.1
	0.1	0.1	0.2	0.3	0.1	0.2	0.4	0.2	0.1	0.5	0.3	0.3	0.3	0.3

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Table 8. The monthly kill index for thirteen duck species in eight years (1968/69 - 1975/76. For each year the number of ducks received by the game firm MØLLER & MELGAARD (Copenhagen) is given (sample), and the monthly distribution is expressed as the percentage proportion of the sample received in each month. See also text page 8.

Year	<i>Anas platyrhynchos</i>						<i>Somateria mollissima</i>					
	Sample	Aug.	Sep.	Oct.	Nov.	Dec.	Sample	Oct.	Nov.	Dec.	Jan.	Feb.
1968/69	20400	15	18	20	23	23	9700	28	30	13	18	12
1969/70	16800	8	28	17	20	28	4400	49	15	18	13	5
1970/71	17700	15	31	20	22	12	4200	26	33	11	9	20
1971/72	23100	24	37	22	10	8	5800	49	27	8	7	9
1972/73	15600	12	34	27	15	12	4900	23	16	10	22	29
1973/74	38200	21	31	28	11	9	7300	49	28	4	10	10
1974/75	19000	13	45	20	16	5	5800	33	10	5	11	41
1975/76	20100	20	35	20	12	13	6300	60	13	7	5	15
Total		17	32	22	15	13	Total	40	22	9	12	17

Year	<i>Anas crecca</i>						<i>Anas acuta</i>					
	Sample	Aug.	Sep.	Oct.	Nov.	Dec.	Sample	Aug.	Sep.	Oct.	Nov.	Dec.
1968	3220	12	31	36	16	6	415	14	38	28	16	5
1969	2728	7	33	37	20	3	518	5	36	39	17	3
1970	5288	8	35	36	17	4	812	4	42	34	18	2
1971	2682	25	30	31	11	3	479	11	31	40	14	3
1972	3272	19	34	31	11	5	498	9	38	37	9	6
1973	4381	12	36	38	10	4	832	8	44	33	12	2
1974	4272	6	30	37	20	7	547	5	30	42	16	7
1975	5621	13	26	43	12	7	816	4	27	54	9	7
Total		12	32	37	14	5	Total	7	36	39	14	4

Year	<i>Anas penelope</i>						<i>Anas clypeata</i>					
	Sample	Aug.	Sep.	Oct.	Nov.	Dec.	Sample	Aug.	Sep.	Oct.	Nov.	Dec.
1968	-	-	-	-	-	-	340	51	24	21	2	2
1969	2331	1	17	38	39	4	344	18	52	18	10	1
1970	3138	1	23	41	31	4	588	34	35	19	10	2
1971	1724	2	23	49	22	3	430	46	29	16	9	1
1972	2153	1	19	49	22	8	424	39	32	22	4	4
1973	2964	3	37	40	18	3	534	37	33	24	5	1
1974	2990	1	18	47	26	7	240	33	30	26	9	3
1975	3459	1	15	62	14	8	240	34	19	36	7	4
Total		1	22	47	24	6	Total	37	33	22	7	2

Year	<i>Aythya ferina</i>							
	Sample	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
1968/69	-	-	-	-	-	-	-	-
1969/70	546	4	7	17	13	15	36	9
1970/71	238	15	17	25	21	3	14	4
1971/72	217	14	9	40	11	3	4	19
1972/73	202	8	10	35	23	14	9	1
1973/74	206	20	12	33	19	8	2	5
1974/75	84	35	11	29	11	14	-	1
1975/76	228	18	15	27	10	15	1	13
Total		12	11	27	15	11	15	8

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Table 8 (continued from page 17)

Year	<i>Aythya fuligula</i>						<i>Aythya marila</i>					
	Sample	Oct.	Nov.	Dec.	Jan.	Feb.	Sample	Oct.	Nov.	Dec.	Jan.	Feb.
1968/69	2057	5	13	7	22	53	187	9	7	6	20	58
1969/70	5815	3	2	11	59	25	1007	1	1	7	54	37
1970/71	1375	7	4	5	70	14	96	8	19	26	11	35
1971/72	1211	8	8	7	8	69	160	8	2	1	1	88
1972/73	621	10	11	7	50	22	152	28	24	7	38	3
1973/74	1206	12	22	23	12	30	129	30	12	9	47	2
1974/75	373	18	13	35	10	24	37	16	14	—	11	59
1975/76	728	17	8	10	11	55	210	2	2	1	2	93
Total		6	8	11	41	34	Total	7	5	7	37	44

Year	<i>Clangula hyemalis</i>						<i>Bucephala clangula</i>					
	Sample	Oct.	Nov.	Dec.	Jan.	Feb.	Sample	Oct.	Nov.	Dec.	Jan.	Feb.
1968/69	617	1	6	15	35	44	452	9	25	22	30	15
1969/70	467	1	2	34	43	20	920	6	10	33	34	18
1970/71	772	1	11	18	22	48	699	6	32	13	39	10
1971/72	412	—	6	9	38	47	291	13	29	9	16	33
1972/73	1308	—	3	12	41	45	324	11	16	39	29	6
1973/74	1149	2	11	8	45	33	412	16	44	10	17	14
1974/75	682	—	—	15	6	78	195	10	21	28	16	25
1975/76	357	1	5	13	27	54	185	10	28	23	13	26
Total		1	6	14	34	45	Total	9	24	22	28	16

Year	<i>Melanitta nigra</i>						<i>Melanitta fusca</i>					
	Sample	Oct.	Nov.	Dec.	Jan.	Feb.	Sample	Oct.	Nov.	Dec.	Jan.	Feb.
1968/69	2401	17	14	9	28	32	860	10	27	13	30	19
1969/70	1316	47	6	22	16	9	512	23	4	40	20	14
1970/71	1044	20	14	11	20	35	498	13	17	23	26	20
1971/72	426	18	12	13	31	26	234	13	32	8	21	26
1972/73	882	12	12	17	34	24	380	13	6	23	26	31
1973/74	842	25	6	2	32	35	273	44	19	3	21	12
1974/75	700	25	1	2	30	43	261	21	2	—	40	37
1975/76	341	21	13	10	9	48	88	27	7	7	13	47
Total		24	10	11	25	29	Total	18	16	18	26	22

	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.
<i>Anas platyrhynchos</i>	63,000	118,000	81,000	55,000	48,000	—	—
Other Dabbling Ducks	14,000	43,000	58,000	25,000	7,000	—	—
Dabbling ducks total	77,000	161,000	139,000	80,000	55,000	—	—
<i>Somateria mollissima</i>	—	—	65,000	36,000	15,000	20,000	28,000
Other Diving Ducks	500	500	13,000	13,000	14,000	30,000	27,000
Diving ducks total	500	500	78,000	49,000	29,000	50,000	55,000
All duck species total	77,000	161,000	217,000	129,000	84,000	50,000	55,000
% per month	10	21	28	17	11	6	7

Table 9. Summary of the monthly distribution of the kill of the four main categories of duck (cf. the official bag record). (Calculated from the average annual kill during three years (1973/74 - 1975/76) combined with information from the monthly kill index [mean values from Table 8]).

Table 10. Age- and sex-composition among bagged ducks, based on material from game firms. See text page 9.

	<i>Anas crecca</i>				J.	A.	Total	J%	<i>Anas penelope</i>				J.	A.	Total	J%
	J♂	A♂	J♀	A♀					J♂	A♂	J♀	A♀				
1970/71	-	-	-	-	282	161	443	64	-	-	-	-	267	99	366	73
1971/72	105	46	141	76	295	147	442	67	35	29	44	16	180	130	310	58
1972/73	149	88	182	121	341	209	550	62	108	56	110	35	226	91	317	71
1973/74	101	11	88	25	189	36	225	84	27	19	31	11	58	30	88	66
1974/75	347	86	332	120	679	206	885	77	153	87	151	20	304	107	411	74
1975/76	240	109	235	140	475	249	724	66	123	122	169	89	292	211	503	58

	<i>Anas acuta</i>				J.	A.	Total	J%	<i>Anas clypeata</i>				J.	A.	Total	J%
	J♂	A♂	J♀	A♀					J♂	A♂	J♀	A♀				
1970/71	-	-	-	-	55	17	72	76	-	-	-	-	16	18	34	47
1971/72	4	8	2	7	42	28	70	60	3	1	3	2	63	16	79	80
1972/73	11	6	15	14	26	20	46	57	4	9	3	11	8	20	28	29
1973/74	3	-	4	1	7	1	8	-	2	1	3	2	5	3	8	-
1974/75	27	10	53	14	80	26	106	75	9	4	14	1	23	5	28	82
1975/76	21	8	46	18	68	26	94	72	3	4	8	5	11	9	20	55

	<i>Aythya ferina</i>				J.	A.	Total	J%	<i>Aythya fuligula</i>				J.	A.	Total	J%
	J♂	A♂	J♀	A♀					J♂	A♂	J♀	A♀				
1968/69	24	43	7	11	31	54	85	36	114	228	87	96	201	324	525	38
1969/70	43	91	31	41	75	132	207	36	548	1250	460	573	1008	1823	2831	36
1970/71	41	44	22	18	66	62	128	52	200	310	184	185	404	495	899	45
1971/72	49	63	22	27	72	90	162	44	227	535	162	287	389	822	1211	32
1972/73	13	21	7	11	20	32	52	38	163	95	70	83	233	178	411	57
1973/74	4	6	7	1	12	7	19	-	42	33	20	19	63	52	115	55
1974/75	8	4	1	2	9	6	15	-	24	60	28	26	52	86	138	38
1975/76	9	5	7	-	16	5	21	-	21	63	23	32	44	95	139	32

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Table 10 (continued from page 19)

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	<i>Aythya marila</i>								<i>Clangula hyemalis</i>								
	J♂	A♂	J♀	A♀	J.	A.	Total	J%	J♂	A♂	J♀	A♀	J.	A.	Total	J%	
1968/69	12	21	9	13	23	34	57	40		87		23	29	110	139	21	
1969/70	135	42	140	56	276	98	374	74		125		31	115	156	271	42	
1970/71	26	28	26	36	54	69	123	44		357		126	205	483	688	30	
1971/72	26	44	19	49	45	93	138	33		99		33	18	132	150	12	
1972/73	19	2	23	5	42	7	49	86		50		16	59	66	125	47	
1973/74	6	-	3	-	9	-	9	-		26		20	118	46	164	72	
1974/75	10	10	3	3	13	13	26	50		236		56	21	292	313	7	
1975/76	2	2	4	1	6	3	9	-		33		10	20	43	63	32	
	<i>Melanitta nigra</i>								<i>Melanitta fusca</i>								
	J♂	A♂	J♀	A♀	J.	A.	Total	J%	J♂	A♂	J♀	A♀	J.	A.	Total	J%	
1968/69				65	55	335	390	14		94		25	75	119	194	39	
1969/70				104	86	465	551	16		113		63	90	176	266	34	
1970/71				177	129	772	901	14		235		124	85	359	444	19	
1971/72				60	41	280	321	13		123		50	32	173	205	16	
1972/73				32	26	208	234	11		110		26	21	136	157	13	
1973/74				47	39	176	215	18		73		38	24	111	135	18	
1974/75				141	39	459	498	8		134		64	31	198	229	14	
1975/76				44	32	180	212	15		38		23	18	61	79	23	
	<i>Somateria mollissima</i>								<i>Bucephala clangula</i>								
	J♂	A♂	J♀	A♀	J.	A.	Total	J%	J♂	A♂	J♀	A♀	J.	A.	Total	J%	
1968/69	1128	628	982	449	2110	1077	3187	62		48	63	31	22	79	85	164	48
1969/70	277	705	295	455	574	1160	1734	33		117	94	144	202	261	296	557	47
1970/71	265	1069	282	750	1050	1819	2869	37		89	91	79	122	169	213	382	44
1971/72	1038	447	931	355	2956	832	3788	78		32	64	35	63	67	127	194	35
1972/73	220	871	179	605	795	1476	2271	35		34	33	25	41	59	74	133	44
1973/74	130	496	121	253	1226	749	1975	62		31	32	29	26	60	58	118	51
1974/75	292	1271	294	720	927	1991	2918	32		13	24	24	31	37	55	92	40
1975/76	327	880	363	528	1663	1408	3071	54		12	16	5	19	17	35	52	33
	<i>Mergus serrator</i>								<i>Mergus merganser</i>								
	J♂	A♂	J♀	A♀	J.	A.	Total	J%	J♂	A♂	J♀	A♀	J.	A.	Total	J%	
1968/69	30	50	30	20	69	70	139	50		3	27	-	7	6	34	40	15
1969/70	89	85	55	64	151	149	300	50		34	58	25	34	64	92	156	41
1970/71	25	41	14	17	40	58	98	41		5	23	4	6	11	29	40	28
1971/72	29	25	12	18	50	43	93	54		9	27	4	11	15	38	53	28
1972/73	4	9	5	4	12	13	25	-		-	6	-	6	4	12	16	-
1973/74	4	15	3	4	9	19	28	-		-	2	-	1	-	3	3	-
1974/75	3	32	5	2	8	34	42	19		1	1	-	2	1	3	4	-
1975/76	2	7		2	4	9	13	-		1	6	2	5	3	11	14	-

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