State of Birds in the Netherlands 2024



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The desire to know

We have been counting birds year-round for many years. Once a year, we compile this State of Birds report to share knowledge and trends of breeding and wintering birds. The various monitoring programmes provide us with information on birds, such as the structured counts that have been running for 25 years through the Ecological Monitoring Network.

'The desire to know' is an important motivation for Sovon as an evidence-based organization. For example, 2024 had the wettest and warmest spring since The Royal Netherlands Meteorological Institute (KNMI) measurements began, and we wanted to know what this meant for the birds, their distribution and reproduction. The results are, of course, nuanced and depend on various variables such as species and habitat. Sometimes the relationship seems easy to establish: a soaking wet forest edge in Drenthe suddenly provides breeding opportunities for Greylag Geese. Sometimes the effects are more indirect: because people and predators do not like wet feet, the reproduction of Common Cranes appears to be more successful than in previous years.

Providing insight into pressure factors is also an important merit of the Dutch National Dashboard for Biodiversity, which was launched this year; an initiative in which Sovon is collaborating with IUCN NL, Naturalis Biodiversity Center and SoortenNL. After all, birds are important indicators of the state of our natural world. The dashboard not only provides highly accessible insights into the state of biodiversity, but also explains underlying pressure factors and estimates future perspectives of all native bird species. All this to keep the government on track in its ambition to full recovery of all species by 2050.

This desire to know also appears to be an important motivation of many volunteer observers. Contributing to knowledge about developments in bird populations is by far the most important motivator for our volunteers. Herewith another personal observation and wish: our trend analysis shows that we have more and more female counters. While this share was 18% in 2018, by 2024 the proportion of female volunteers increased to 23%. Hopefully, we won't have to wait until 2050 to increase this share to 50%.

I wish you a lot of reading pleasure. Once again there is a wealth of knowledge to be discovered in this State of Birds. With great thanks to the counting efforts of thousands of bird counters.

Dianne Nijland

managing director Sovon Vogelonderzoek Nederland



Coal Tits decrease in numbers. Photo: Jeroen Veeken »



The state of birds

Flora and fauna richness is not only beautiful, but it also ensures a sustainable food supply, clean drinking water, a healthy living environment and meeting climate goals. The Dutch National Dashboard for Biodiversity includes bird counts to provide insight into the state of biodiversity in the Netherlands

Globally, biodiversity is in rapid decline. At the international level, nearly two hundred countries have agreed on biodiversity targets and a strategy to achieve these goals, summarized in the Biodiversity Agreement. It stipulates that all participating countries must halt the loss of biodiversity by 2030 and restore it by 2050. The Netherlands has also committed to these international goals.

Barometer of nature

To monitor the state of our natural world, measurements are very important. Accordingly, we can provide insight into how it is going and whether redirections need to be made. This is why the Dutch National Dashboard for Biodiversity, a website that provides a quick overview of the state of biodiversity in the Netherlands, was launched on 22nd of May, the International Day of Biodiversity. Fourteen goals have been defined within the four themes: biodiversity, space for nature, pressure factors and system change, each with one or more indicators that provide insight into the status and progress of the goal. Traffic light colours indicate whether the goal is achievable. Green means the goal will be met if the trend in recent numbers continues. Orange means additional effort is needed to meet the goal. Red indicates that meeting the goal is getting further and further out of sight. The dashboard shows that the recovery of biodiversity in the Netherlands is not on track: none of the targets are green.

Restoration of biodiversity Stop biodiversity loss 100 90 80 70 60 % of species 50 40 30 20 10 0 77-82 83-88 89-94 95-00 01-06 07-12 13-18 2030 2050 favourable = moderate unfavourable highly unfavourable = unknown

Reconstruction of the conservation status of breeding birds and wintering birds in the Netherlands and targets for 2030 and 2050.

More information?

The Dutch National Dashboard for Biodiversity is the joint property of IUCN NL, Naturalis Biodiversity Center, SoortenNL and Sovon Vogelonderzoek Nederland. Visit dashboardbiodiversiteit.nl for more information.

Bird counts provide insight

Birds are important indicators of the state of biodiversity. In the dashboard, bird counts are used to make that clear. They are incorporated in the so-called conservation status (staat van instandhouding): for all native species, the distribution area, the development of numbers and the available habitat are examined, and an estimate is made of the prospects. It then assesses whether the conservation status is favourable or unfavourable. Currently, 42% of the native bird species have a favourable status, while the 2050 goal is for all species to have a favourable status. Favourable means that a population is healthy and can occupy its natural range at optimal densities. In the dashboard, the data were not only considered by each species separately. For the ecosystem restoration goal, averaged species trends were used to compare trends by habitat type. This shows that in general marshland species are doing quite well, but species in open natural areas (such as dunes and heathland) are not.



Trends of breeding birds per habitat

Indicators are used to monitor trends in Dutch bird populations in different habitats. These indicators give a first impression of the changes in bird populations within a habitat and are compiled from the population trends of characteristic species in the different habitats. The indicators are part of the Living Planet Index (LPI) calculated by the CBS. For some time, decreases have been observed in agricultural areas and open natural areas such as heathland and dunes. The numbers of characteristic meadow birds such as the Black-tailed Godwit and the Northern Lapwing have decreased strongly in recent decades. In contrast, wetland birds have shown an upward trend in recent years. Herons and species that live in established reed beds such as the Bluethroat are doing well. Forest birds have also recently shown a slight increase.

The indicators are particularly suitable for obtaining a general impression of the situation per habitat. It is important to keep in mind that the development of the underlying species can vary considerably.



The positive development of birds that breed especially in wetlands stands out the most. Think of species such as Eurasian Bittern, Sedge Warbler and Savi's Warbler. That said, there are major differences among wetland birds, for example, species such as Garganey and Great Reed Warbler have decreased sharply.

Developments in forest birds

Over the entire period since 1990, the indicator for forest birds shows a stable trend, with even a slight increase in recent years. Below the surface, however, there are clear differences between species, which can mostly be explained by their ecology. For example, species that breed in natural cavities are increasing in deciduous forests whereas cavity-nesting species with a preference for coniferous forests are showing a decrease. This seems to be related to the transformation of planted coniferous forests into deciduous forests and the aging of existing deciduous forests, in which more dead wood remains. Breeding birds that breed in open nests in coniferous trees show a variable pattern. Red Crossbills and Eurasian Siskins, for example, breed in greater numbers after winters with influxes, while numbers remain low in years without influxes. By comparing the trends of these ecological species groups, we can better understand how changes in forest habitats affect the different breeding bird species living here.



Trends of breeding birds in forests vary greatly by forest type and nest type. European Crested Tits and Coal Tits nest in cavities of dead coniferous trees and are decreasing in numbers. Most species that nest in older deciduous trees, for example Eurasian Nuthatch and Lesser Spotted Woodpecker, are increasing.

In most provinces the number of breeding Greylag Geese is increasing. Photo: Harvey van Diek



Differences in breeding geese

As well as the wintering populations of geese, breeding geese populations have become increasingly large in recent decades. Greater Canada Goose, the Greylag Goose and the Egyptian Goose can now be found in almost every part of the country. However, the distribution of these three most numerous breeding geese differs. While the numbers of some wintering goose species have stabilized or even decreased recently, breeding geese are still doing well nationwide, although differences are visible at the regional level. Among these regional trends, the Greater Canada Goose stands out. In seven of the eleven provinces with sufficient data, the trend over the last twelve years is positive. Greater Canada Geese are increasing strongly in both known strongholds (Zuid-Holland) and in provinces more in the periphery of the distribution, such as Overijssel and Zeeland. A similar pattern is evident in the Greylag Goose. The population is increasing in nine of the twelve provinces, with the highest growth rates in the three northern provinces, and in Limburg, Noord-Brabant and Zuid-Holland. In contrast, the breeding population is stabilizing in Gelderland and Utrecht, and a decrease is visible in Flevoland. The picture for the Egyptian Goose is more variable. The Egyptian Goose has increased in only three of the eleven provinces over the past twelve years, while in five provinces numbers appear to be stabilizing. In both Overijssel and Drenthe, the Egyptian Goose has decreased over the past twelve years.

These differences by province may have several causes. These include natural processes, such as reaching the carrying capacity of a breeding area and the colonization of new breeding regions. In addition, the provinces have used various measures over the past fifteen years to reduce the populations of breeding geese. Both the type of measures and the intensity of their deployment can vary from province to province. For the Barnacle Goose, which is not discussed here because sufficient data are only available for two provinces, this has led to a substantial reduction in national numbers during the breeding season. For the other species, it would be interesting to examine the extent to which differences in provincial management have affected their trends.

> Provincial trends of breeding populations of Greater Canada Goose, Greylag Goose and Egyptian Goose since 2012.



Greater Canada Goose

Greylag Goose

Egyptian Goose

» Increasingly fewer Black Terns are counted at nocturnal roost sites. Photo: Harvey van Diek



Tundra Swans increasingly rare

A wetland or beet field with a large group of bellowing Tundra Swans is a spectacular sight. But this spectacle is becoming increasingly rare in our country. A maximum of 3000 to 4000 swans are currently counted in the Netherlands. In the mid-1990's numbers were still around 20,000. Not only has the entire flyway population more than halved since then, but the proportion of swans wintering in our country has also strongly decreased. In the peak period in the mid-nineties, two-thirds of the population visited our country, nowadays this is only one-third. Tundra Swans are increasingly abandoning the Netherlands. The background for this development is a shift of the species' winter range to the north, which is confirmed by transmitter data and sightings of colour-ringed individuals. Warmer winters are a major cause of this shift. It began around 1990 with a decrease in Ireland, and over the past 10-15 years winter populations have also diminished in both Britain and the Netherlands, formerly the two main wintering areas for the species. In contrast, birdwatchers and counters in Germany and Denmark observe increasing numbers of Tundra Swans. Current census data from Germany suggest that numbers there are already past their peak and that large concentrations overwinter mainly in Denmark. In the Netherlands, the decrease is evident not only in the smaller numbers during the peak moment in December and January, but also in the strong decrease in the autumn and late winter. Around the turn of the century, the first large groups arrived as early as October and a large part of the wintering population was already present in November. Nowadays, we have to wait until December for larger numbers and most swans leave shortly after the Midwinter Count in January.

Declining trend Black Terns

After the breeding season, thousands of Black Terns assemble in the IJsselmeer region to moult and fatten up for the autumn migration to wintering areas along the west coast of Africa. Numbers increase from the end of June and peak in August. During daytime, Black Terns forage primarily on smelt but also on mosquitoes. At night, they use nocturnal roost sites in the IJsselmeer region and the western part of the Wadden Sea. All known roost sites are counted simultaneously to determine the population outside the breeding season. Because numbers can vary greatly per count, seasonal maxima are used to monitor trends.

In the 1980s and 1990s, over 100,000 Black Terns were counted on Dutch roost sites. Nowadays, the numbers are significantly lower. In 2021, 11,600 Black Terns were counted on the roost sites: a 90% decline in thirty years. In the last three years, the number of Black Terns dropped even further to 4,000-6,000. The results of the roost counts are consistent with the downward trend of the breeding bird population in the Netherlands and elsewhere in Europe. However, there is more at play as the food supply in the IJsselmeer has decreased. Balgzand and Marker Wadden currently host the most important nocturnal roost sites. The numbers in the rest of the country are very small.



Trend of migrating Black Terns (seasonal maxima) in the Netherlands, based on night roost sites counts.



based on waterbird counts.

Recent increase of Kentish Plover

The Kentish Plover is one of the Dutch breeding birds for which the conservation status for the European Birds Directive is unfavourable. About 210 pairs were counted in 2023, more than two-thirds of them in the Delta area. Initial reports from 2024 suggest a slightly higher number. This corresponds with an increase that has been evident in the IJsselmeer region, in the Wadden Sea region and on the coast of the Wadden Islands since 2016. Although only a few dozen pairs are involved in these regions, the recent figures sound optimistic. A striking increase took place in the IJsselmeer region after construction of Marker Wadden and other new areas in the Markermeer. Almost parallel to this development, more and more Kentish Plovers are finding suitable breeding sites in the Wadden Sea area and on the coast of the Wadden Islands, especially on Vlieland, Ameland and Schiermonnikoog. Thanks to their mobility, the birds apparently know how to find suitable areas quickly. Kentish Plovers recently also benefit from targeted protection measures. For example, since 2019, nests in the Delta region have increasingly been protected by volunteers, leading to local increases in the number of breeding pairs and improved breeding success. In the Wadden area, similar activities are taking place on several islands - Ameland in particular has a long tradition - and the species is a focus of the 'We and Wadden Sea birds' (Wij & Wadvogels) programme of the Dutch BirdLife partner Vogelbescherming and partners.



Trend in breeding pairs of the Kentish Plover by breeding region. The number is shown as an index relative to the year 1990.

Availability of insects affects the egglaying of many songbirds, such as Eurasian Nuthatch. Photo: Martin van der Schalk

Egg-laying and spring temperature

Data on the breeding performance of birds is collected with the help of thousands of volunteers through the Dutch nest record scheme (Meetnet Nestkaarten). Dozens of bird species have been monitored this way for decades. Using this data, Statistics Netherlands (CBS) has developed an indicator that shows how breeding birds are responding to the changing climate.

Sufficient data is available from fifteen species of birds (mainly resident birds) to analyze egg-laying dates from 1986 onwards. It shows that the date on which these birds start laying eggs in the Netherlands has progressed by an average of eight days. This advance took place mainly before the turn of the century. After that, the egg-laying date of many species seems to have stabilized. This corresponds to the increase in the average spring temperature in the Netherlands. Until about 2000, the spring temperature increased more strongly than in the period after that.

So, there is a link between spring temperatures and egg-laying: in years with higher spring temperatures, many birds start laying eggs earlier on average. This is not surprising considering that many of the fifteen bird species that were studied depend on insects to provide food for their young, especially small songbirds like the Great Tit, Eurasian Nuthatch and Common Starling. In warmer springs, insects become active earlier, so for insectivores it is beneficial to start breeding earlier. Not every bird species starts laying eggs earlier on average. In birds of prey for example, this relationship cannot be seen: of the seven species analyzed, the average egg-laying date has been stable since 1995, although there may be considerable fluctuations between years (see also page 29). Raptors have other food sources, which in turn are influenced by other factors than just spring temperature. For example, number of voles and mice may be related to winter weather conditions and the availability of beechnuts.

Thanks to the wide range of bird species monitored by the Dutch nest record scheme, we find that different species are responding in different ways to the rapidly changing climate. Nest data is an important piece in the puzzle of explaining changes in bird populations. From a single record from a nest box in the garden to large-scale nest monitoring in a study area, everything contributes.



Average first egg-laying date of fifteen bird species per year, with the 95%-confidence interval in dotted line.



Relationship between spring temperature and average first egg-laying date of birds (selection of fifteen bird species).

The state of our



Species' changes determined with the national bird monitoring programmes of Sovon and CBS (Ecological Monitoring Network). Left: Breeding bird trends (since 1990) are presented based on data from the Breeding Bird Monitoring Programme. Right: Trends of migratory and wintering birds are presented (since 1980/81) based on the data from the Waterbird Survey, the Roosting Areas Counts, and the Point Transect Count Project (PTT). The species are grouped according to their main habitat. Generalists are arbitrarily assigned to a habitat. Trends are

ranked from strong increase (green) to strong decrease (red) The height of the bars is a measure of the strength of the average annual change For example, a value of -5% means a decrease of almost 80% over 30 years. Changes greater than 10% per year are capped for readability. For trends with no significant long-term change, a distinction is made between stable numbers (yellow) and fluctuating numbers (orange).

birds per habitat



More information?

Visit our websites for more information:

- > national, regional and Natura 2000 trends for each species: stats.sovon.nl
- > species distribution: vogelatlas.nl
- > monitoring reports: stats.sovon.nl/pub

Source: Netwerk Ecologische Monitoring (Sovon, RWS, CBS, provinces)

≈ Northern Goshawk. Photo: Thijs Glastra

Very wet spring: do we see effects?

The 2024 breeding season will go on the record as being very wet. There was abundant rain in April and May, and in many places the soil was already saturated with water due to the heavy rainfall in the previous winter months. Can we see how all this water is affecting breeding birds?

Weather conditions greatly affect the course of the breeding season. Fluctuations in temperature for example, affect the availability of insects. Drought can make soils too hard to pierce with beaks to search for worms and other food. High rainfall can drown nests. Whether and how effects of weather affect bird establishment and breeding is a complicated puzzle. Most research on weather effects on birds focuses on temperature changes and shifts in phenology. Effects of rain and drought are less frequently considered and are not easy to measure. Moreover, they can have contrasting effects. For some birds, wet conditions provide more suitable habitat, more security or better foraging conditions. Other species suffer from rain because they can catch less prey, nests are flooded and young become undercooled. Based on the data from the 2024 breeding season that was already available, we will examine if we can observe and quantify impacts.

Wetter than ever before

The spring of 2024 followed a very wet winter, which already resulted in saturated soils and high water levels in many areas. Spring was both the warmest and wettest since KNMI measurements began - March and May in particular were considerably warmer than on average. There was also a lot of rainfall, although this varied greatly by region. In the period between 15th and 26th of April it rained every day. Especially in the middle of the country there was much more rainfall than normal. May began sunny and warm, but in the second half of the month it became cool and rained more often. Most precipitation fell in the southern half of the country, although it also rained a lot in the three northern provinces. June began cool but ended with warm days, making it an above-average warm month in the end, with normal amounts of precipitation. The beginning of July was cool and only at the end of this month it became warmer. In parts of Noord-Brabant and the northeast of the country, there was local heavy rainfall in July; in Twente some places even experienced more than 200 mm.



Precipitation deficit (daily precipitation sum minus reference crop evaporation) at De Bilt in April–July in 2024, averaged over 1980–2010 and 2018–23 and in two recent dry years (2018 and 2020) (knmi.nl). An increasing line shows an increase in drought and decreasing line a precipitation surplus.





Waterbirds in the dunes

In some parts of the Netherlands, the high water levels caused extraordinary scenes. In certain dune valleys in the Dutch dunes where a lot of water remained, Gadwalls and Little Grebes turned up, some of which were successful in breeding. For Black-necked Grebes, which breed on the floating parts of aquatic plants, many of the ponds in the Noord-Hollands Duinreservaat became too deep for nesting. On the other hand, for Great Crested Grebes the water suddenly became deep enough. On Vlieland, the high water levels resulted in breeding Lesser Black-backed Gulls and European Herring Gulls that were suddenly accompanied by Gadwalls and Northern Shovelers because puddles had formed in the middle of the gull colony. On the nearby Vliehors, significant amounts of water remained on the sand after rainfall, resulting in nests of Little Terns and Kentish Plovers being flooded.

No outliers

In some places in our country, numbers of breeding birds were less, if at all, effected by the wet spring. A large part of southwest Drenthe is surveyed annually. Water levels in areas in this region were highest in March. However, there were no outliers in the trends of most breeding birds. For example, the number of Little Grebes was not significantly higher than in the two previous years, nor were the numbers of Northern Shovelers or Spotted Crakes. Whinchats, which build their nests on dry parts of these peatlands, where recorded in similar numbers as in previous years. The only two species that seemed to benefit were Water Rail and Common Snipe, which rely on marshy grasslands and fields that include soft rush. The wet spring also benefited breeding Common Cranes. The rain reduced predation in the breeding areas because predators could less easily access nests. Recreational pressure was also lower. The breeding success of 53 pairs was 0.87 fledged young per pair, much better than in the dry years of 2018-2020 (0.28).



Breeding success of songbirds

Wet weather can affect the breeding performance of several species. The database of the Dutch nest record scheme already contains a lot of information from 2024. This allows us to examine the effects of wet weather, albeit with some caution. For Great Tit and Blue Tit for example, the percentage of successful nests is quite low. For Blue Tits, 2024 ranks among the worst 20% for the species. For the Great Tit, the effect was not as great; in only about a third of the years surveyed so far, was nest success lower than in 2024. Altogether, the breeding success among the tits does not seem to be as poor as expected. The breeding success of the Blue Tit for example, was much lower in 2021. In that year, the spring was not only wet but also very cold. In contrast, in the spring of 2024, average temperatures were high and even at record levels. It is possible that this higher temperature 'saved' the breeding success of tits. It reduced the risk of eggs or young in the nest suffering from hypothermia, allowing more time to be spent foraging than under cold conditions. As cavity breeders, tits have the additional advantage that their nests tend to stay relatively dry. Some species struggled more than tits in 2024. For example, the Blackbird's nest success was historically low; from a sample of 55 nests, the percentage of successful nests was found to be only 15% (average over all years is 26%). The Barn Swallow also had a difficult year with a nest success of 71%. In the years 2010-22 this was always between 75-85%. Presumably the heavy rainfall at the end of May caused poor foraging conditions.



Nest success (percentage of nests with at least one fledged young) of Great Tit and Blue Tit. Data from 2024 are not yet complete and as yet based on a lower sample than in other years (Great Tit 1417 and Blue Tit 797 clutches).

Wet conditions in the breeding areas of Common Cranes led to less predation and disturbance from recreation this year. Photo: Herman Feenstra

Surprising Storks

Some bird species managed to have a good breeding season despite poor expectations. Perhaps the most surprising was the White Stork. Small White Stork chicks are sensitive to a lot of rainfall, especially when the parent birds leave the nest to forage as they are not able to keep themselves warm, resulting in undercooling and eventually mortality. The expectation was that the heavy rainfall in May, when the young White Storks are still small and vulnerable, would have a serious impact on the young. In some regions, the negative effects of the weather were indeed noticeable, and the timing of the heaviest rainfall turned out to be very negative for the White Storks. Across the country however, it ultimately turned out to be a fairly average season for the species. Preliminary data show a nesting success rate of 73% (average for all years is 75%) and an average number of fledged young per successful nest of 2.2 (average for all years is 2.1). The Storks proved to be considerably more resilient than expected this year. The impression is that nests started earlier were more successful. Possibly the young from these early nests were already large enough to keep themselves warm in the second half of May, when the wet conditions peaked. This rather surprising result shows just how nuanced weather effects can be.



∧ Photo: Harvey van Diek

A difficult year for mouse-eaters

Another group that seems to have been significantly affected by the bad weather are the mice eating species. Already during the very wet winter many grasslands were flooded and due to the continuous rainfall, this water remained in some places until late spring. These flooded fields are disastrous for the common vole, for example, which uses underground corridor systems as food storage, resting places and nurseries.

Common voles are an important staple food for many mouseeaters, and it was noticeable that species such as Western Barn Owls, Little Owls and Common Kestrels had difficulty foraging for sufficient food. Reports from the field mentioned very little 'mouse supply' in owl nest boxes and relatively many remains of birds in nest boxes used by Common Kestrels, indicating a switch



to alternative food sources. It was also frequently mentioned that some of the young birds in nest boxes were found dead. Usually this means that insufficient food was present to feed all the young. The nest records collected so far support this picture of partial mortality. For the Common Kestrel, Little Owl and Western Barn Owl, the number of fledglings per successful nest was low. For the owls in particular, the data are heading towards one of the lowest values observed to date.



The average number of fledged young per successful nest over the years for Common Kestrel and Little Owl. Data from 2024 are not yet complete and, for now, based on a lower sample than in other years (Common Kestrel 171 and Little Owl 726 clutches).

Seabirds through all weathers

Due to its long coastline, the Netherlands has a considerable area of territorial waters in the North Sea. This Dutch part of the North Sea is important for various seabird species. During the year, species such as Razorbill, Common Murre and Northern Gannet forage in our waters. In spring and autumn, birds such as Sooty Shearwater, Parasitic Jaeger and several species of terns migrate along the coast, on their way between their breeding and wintering grounds.

It is challenging to collect reliable data on the occurrence of these seabirds. This is because many of the birds are far out on the water. Counts from a small aircraft offer a solution but due to the high costs are conducted only six times a year. This makes it difficult to get an accurate picture of seabird species which show a peaked appearance in Dutch waters. A count may coincide with the peak of the migration, or not. In addition, some species are so rare that to few individuals are observed to unravel patterns in their occurrence.

Systematic seawatching during migration

Fortunately, birders have been watching birds over the sea from from counting points since at least 1972. The data collected by birders who count during migration is available on the website trektellen.nl and is a valuable addition to the counts performed from aircraft. Migration counts provide important information about the numbers of seabirds per hour, the so-called hourly averages (number of birds of a species per hour counted). Since the 2014/15 counting season, this data has been used in part to determine trends of seabirds.

The visibility of seabirds from the coast is strongly influenced by weather, especially wind. Shearwaters and jaegers usually stay far out at sea but are blown closer to shore by strong onshore winds, which increases the chance of being observed and thus the numbers counted. Other species, such as Red-throated Loon, naturally fly closer to shore, so the numbers counted are less affected by wind conditions. This influence of wind can be clearly seen in the figure on the right, where the hourly averages of the Parasitic Jaeger and Red-throated Loon are shown for different wind forces from different wind directions. The harder the wind blows from the west, the more Parasitic Jaegers are visible from the shoreline. The Red-throated Loon shows a more scattered picture without large peaks in hourly averages: the influence of wind is apparently smaller.

Influences of weather

To ensure that trends are not strongly determined by annual fluctuations in weather, such as the varying number of westerly storms, weather effects are corrected for in the trend calculations. Thus, both wind direction (on or offshore) and wind force are taken into account. The correction also takes into account the date and time of the day, as well as systematic differences in bird numbers between counting stations. For several species, data from the sea counts are integrated with data from aerial counts.



➢ Hourly averages (number of birds per hour counted) of the Parasitic Jaeger and Red-throated Loon during different wind directions and wind forces (bft) along the west coast of the Netherlands (Texel to Zeeland). At least 50 hours were counted at each wind force-wind direction combination. The rings in the figure correspond to an hourly average of 0.5 (Parasitic Jaeger) and 20 (Red-throated Loon) birds.



The Ecological Monitoring Network

In the 1980s, Sovon started organizing national and regional bird counts. Since 1999 these counts, together with monitoring programmes for other species groups such as butterflies, have been incorporated into the Ecological Monitoring Network (Netwerk Ecologische Monitoring, NEM). In this network, governments collaborate to coordinate and support the information needed for nature policy. Bird counts form an important basis, as emphasised by the Dutch saying, 'measuring is knowing'.

Fieldwork within the NEM monitoring networks is carried out almost entirely by many thousands of expert volunteers. Bird counts are used to answer all kinds of policy questions (including the monitoring of objectives). When the network was established, there were only a few guiding objectives for birds, such as the development of Red List species and the development of birds' populations indicative of freshwater and saltwater national waters. Nowadays, it also responds to topical questions, such as the impact of bird flu on populations. More and more nature-related policy questions are being addressed to the NEM. For example, the results from the bird monitoring networks are used to prepare reports for the European Commission. Other examples include measures under the Birds Directive, the implementation of Natura 2000 policy and the assessment of the impact of agricultural nature management in the Netherlands.

In the past, the emphasis was mainly on determining national trends based on censuses. Nowadays, however, there is so much data available that provincial trends are also becoming available for more and more species. Species with area targets are also well monitored in most of the 68 Bird Directive areas. Developments continue and in recent years the emphasis is increasingly on measuring the population sizes of species at the national, provincial and area level.

Ecological Monitoring Network

Breeding Bird Monitoring



Species

- Breeding Bird Monitoring Programme (BMP)
- Colony nesting birds
- Rare breeding birds

Habitats

- Farmland Bird Survey (MAS)
- Urban Bird Survey (MUS)
- Coastal Birds Wadden Sea
- National fresh waterways (Rijkswateren)

Reproduction

- Nest Record Scheme
- Repro Wadden

Programme Waterbird Survey



- Waterbirds (all species)
- Geese/swans
- Midwinter (January)



Overview of the bird monitoring programmes of the Ecological Monitoring Network (NEM).

Photos from left to right: Thijs Glastra, Rick van der Kraats, Harvey van Diek

Citizen Science

In the Netherlands, research on the distribution of flora and fauna largely depends on the efforts of volunteers who report their counts. With this so-called citizen science, citizens actively contribute to the collection of scientific knowledge. This way of collecting data has become more well-known in the Netherlands in recent years. This development is inextricably linked to the rise of the internet and smartphones, which have made the collection and processing of research data much more achievable. Wageningen University & Research calculated that in 2021 alone, volunteers spent at least 641,500 hours in the field researching of the occurrence of plants and animals in the Netherlands.

From observing to counting

There is an essential difference between single observations and structured counts. In the projects that are part of the NEM, protocols are always used to guide the censuses. This provides a fixed way of observing the environment, with a specific counting time or counting period. Standardizing the approach in the field, for example the places that you count or the way you walk or observe along a route, is what makes a series of observations a count. For single observations, this is not a requirement. In the absence of such counting protocol, observations that have not been collected within a count can hardly be compared. Thanks to the efforts of volunteers who are willing to count according to a fixed approach, we know a lot about the state of our natural world. Conversely, as a counting volunteer you often experience a strong connection with 'your area' and the knowledge that the data is used by a site manager, conservationists and for nature policy is an important reason to go into the field.

Learning to count

To count birds, birders need at least two skills: it is important to be able to recognize the species in guestion and to be able to apply the method in the field. Many birders gain experience by joining experienced counters. Another way to start participating in a census project is to take a practical course. For various projects, courses are offered throughout the country, often in cooperation with a site managing organization or naturerelated organization. To assist bird counters even better, Sovon has established the Sovon Academy. In addition to the practical courses, online courses, webinars, (digital) refresher evenings, instructional videos and lectures are also offered. The online courses cover three different learning paths: breeding birds, winter birds and migratory birds. Between 400 and 600 students take part in each edition, as many women as men. Of all students, 5–10% join the NEM monitoring network and start within one of the census projects. The courses cover the various species per habitat and discuss their occurrence, recognition and breeding behaviour.

Motivated into the field

What motivates birdwatchers to do censuses and how do they value Sovon's support in doing so? In October, we asked those questions via an online survey. The questions were a repetition of our 2018 survey. The results provide a good picture of the motivations, commitment and how volunteers feel connected to the organization.

A total of 1149 respondents

completed the survey, nearly one-fifth of all participants contacted. The number of years of participation was evenly distributed.

This gave us a representative impression as well as valuable . suggestions to support volunteers even better.

23%

Who?

Most volunteers have been counting for one (or more) of the Sovon projects for many years. The average age of birders active for Sovon is 59 years and has been stable for some time. In recent years, changes can be noted in the composition of the volunteers. For example, the proportion of women has grown from 18% in 2018 to 23% in 2023.



How do volunteers get acquainted with Sovon?

Observers come in contact with Sovon's projects in many ways. Local bird clubs still play an important role in this, although this role has decreased slightly compared to 2018 (45% vs. 51%). Word of mouth continues to work well. The importance of courses, lectures and other events has increased slightly. Courses from local bird clubs are frequently mentioned under the category 'other'. In recent years, Sovon has invested more time in organizing courses and started the Sovon Academy. More course evenings and lectures were organized in cooperation with local bird clubs.

Why?

We asked for the three main motivations for participating in census projects, people could choose from seven different motivations.

Contributing to knowledge about bird population trends is by far the most important reason for going into the field for a census project. Among the comments, some observers emphasized the pleasure that counting birds gives and that it is a good and healthy reason to go outside: 'A bird list a day keeps the doctor away'. Others put the 'counting for Sovon' into perspective. For them, the fact that the data can be put to good use is not so much the reason for counting but it is a nice bonus. The social aspect is not considered very important. Counting birds is mainly an individual activity, although there are groups that combine for example the waterbird census with socializing.

- 1. Contribute to knowledge about trends in bird populations
- 2. Contribute to nature conservation/management
- 3. Learn more about nature/birds
- 4. I feel connected with my (counting) area
- 5. I enjoy counting/ringing/nest recording
- 6. Making beautiful observations and seeing different species
- 7. Getting in contact with other birders

Descending from most important (1) to least important (7)

Volunteer's view of the organization

We asked which description best fits Sovon. Over three quarters of the observers said that knowledge and research fits best. The fact that Sovon is an association for birders was ticked less often. Few see Sovon as a nature conservation organization. Unlike in many other countries, monitoring and protection are separated into two organizations in the Netherlands. The core task of Vogelbescherming Nederland is to defend the stakes of birds. Sovon collects data with thousands of volunteers and makes them available for nature management, protection tasks itself. So, this appears to be well known to those who were surveyed.



citizen scientist volunteer (amature-)bird researcher outdoors person bird protector bird expert bird lover species specialist nature lover

Who is the observer who counts birds, rings them and searches for nests? We asked our volunteers to choose up to five words with which they identify. 'Nature lover' and 'birder' were chosen the most. 'Bird lover,' 'outdoors person' and 'volunteer' scored equally high. Most observers did not choose a more specific description, such as 'ecologist' and 'bird researcher.' 'Species specialists' make up the smallest minority. We see these results reflected in participation in the projects. For example, there are far fewer birders participating in ringing projects such as the Constant Effort Sites (CES) or involved in nest surveys.

Reasons to quit

What is the reason for discontinuing counting birds? We asked this question to 1507 observers who were no longer active in the past three years. 189 responses reflect the main reasons for stopping. Decline in health is by far the most frequently mentioned reason. Often this is age-related, for example declining hearing and eyesight. Moving house was also mentioned as a reason. Of those interviewed, 10% indicated that they had only stopped temporarily and had plans to become active again. Only 3% no longer enjoyed it and had therefore dropped out. From the other survey it is evident that birders are people with a long endurance: there is a great willingness (59%) to continue for ten years or more.

Need for information

We also asked respondents about their information needs. About half of the respondents said they would like to see or read more about how census data is used and what kind of research is done with it. There is also a need for more reporting on the results of projects in which they participate, and they want to know more about current bird populations. Information about courses or bird identification is not necessarily desired.

The whims of the Corn Crake

Once upon a time, the Corn Crake was a well-known breeding bird in large parts of the Netherlands. The many folk names in circulation indicate as much. Meanwhile, the heydays are over, and the species has been showing ailing numbers for years. In 2023, 'crex-crex' was heard less than ever, 2024 was a better year.

Corn Crakes set very specific requirements for their habitat. When they arrive in May, they look for vegetation that provides sufficient cover. At the same time, the vegetation must not become too dense, because Corn Crakes must be able to walk through the vegetation. Hay meadows along rivers and creek valleys meet these conditions, and locally also arable crops such as alfalfa and winter cereals. Natural areas with year-round grazing are usually only attractive in the first years after redevelopment but lose their appeal if the vegetation becomes too dense over time (heavily grazed areas remain too open). Because Corn Crakes have a long breeding season, their success hinges on adequate protective measures. These measures do not only consist of the prevention of mowing out established birds, but ideally also take into account that new settlements occur until July. To maintain the population, Corn Crakes must successfully breed twice during the period May to August. Although measures are successfully implemented by area managers and farmers, the conservation strategy for Corn Crakes is not always easy in practice.

Fluctuations are normal

For a species so dependent on a good breeding success, fluctuating numbers from year to year are quite common. In the Netherlands, Corn Crakes generally show significant decreases. Around 2000, the species experienced a revival, caused by changes in politics and the collapse of collective agriculture in Eastern Europe. This created suitable habitat on a large scale. This revival seems to have had a short-lived effect; the last peak year of 2012 is now more than ten years behind us.



Fragmented breeding populations

In most countries around us, the occurrence of Corn Crakes is fragmented. In Eastern European countries such as Poland, the Baltic States, Belarus and Russia, the distribution is much wider, and Corn Crakes are more numerous. Fluctuations in the Netherlands have much overlap with those in other Western European countries, suggesting that they are related to what is happening to the east of us. Droughts, floods or noticeable changes in agricultural use can cause hundreds of Corn Crakes to move to other places. This can quickly lead to a notable spike in our country.

Revival in 2024

Only eleven calling males were heard in 2023, a historically low number since the national census began in 1980. Despite this low record, the curtain has not yet fallen for the Corn Crake in the Netherlands. In the spring of 2024, a surprising boost was observed: more birds turned up in natural areas, hay fields, fallow land, grain and alfalfa fields, even though high water levels caused less suitable breeding habitat along rivers and creeks. Presumably the birds were still able to enter unmown hay fields especially after the end of June. A total of around 75 locations with calling males were detected, both in known and new locations.

Stronghold

In 2024, most Corn Crakes were heard in the province of Groningen. In the stronghold at Oldambt, 23 territories were found. This large-scale arable area usually hosts 20–30% of the national population. Besides Oldambt, fixed breeding areas are the creek valleys in Drenthe and Friesland, the floodplains of the Zwarte Water and the estuary of the Overijssel Vecht, and the floodplains of the IJssel. In years with higher numbers, this distribution is largely maintained, with only local expansions along the Waal, the Nederrijn and in Flevoland. Outside these areas, calling sites are mainly occasional.

« Trend of the number of calling Corn Crakes in the Netherlands since 1980; 2024 is still preliminary.

Challenges in audio monitoring with AI

It is very likely that you have at least once grabbed your phone to identify a bird sound in the field. More and more birders are using smart apps like Merlin and BirdNET that can use artificial intelligence to identify bird sounds. Useful for an inexperienced birder, but for application in bird research, there are still many challenges to overcome.

Automatic recognition of bird sounds begins with an algorithm. This is in fact nothing more than a collection of rules stating which sound belongs to which bird. One of the best-known algorithms is the American BirdNET, developed by Cornell Lab of Ornithology and Chemnitz University of Technology. Another example is the Google Bird Vocalization Classifier, which uses bird recordings on Xeno-canto. Recognition software is also being developed in the Netherlands, for example by Naturalis (AvesEcho) and the company Aquila Ecology, which is developing algorithms to recognize not only birds but also bats, mice, grasshoppers and crickets.

Missed a bird

Algorithms are also behind the previously mentioned smartphone apps. By setting time and location, these apps work with a specific species list so that you do not suddenly see all American songbirds listed, for example. The apps can be a useful tool for birdwatching and counting but are anything but reliable. A common – and recognizable – problem is false negatives, or in other words, bird sounds that the app does not pick up. A bird may be too far away, or there may be background noise that prevents the algorithm from recognizing a bird sound. Different birds singing at the same time also frequently cause misses. And because the species list depends on your location, species can be excluded that the app does not expect to be in that location at that time. Useful for American species, but it may miss an early (or late) migrant bird.



AudioMoths can make continuous recordingin the field, which can then be compared with observations from the field. Photo: Harvey van Diek

Mistakenly heard

A bigger problem is a false positive. In that case, the algorithm comes up with a bird that is not there at all. There are ample examples of this. A singing Blackbird that is occasionally mistaken for a Mistle Thrush, a Western Osprey that turns up in the middle of town or a European Turtle Dove that is heard in a busy residential area. These sightings should be taken with great caution. If observers have inadequate bird knowledge and blindly accept the recordings, these false positives can be included in the census data. This makes it important to be cautious about using recognition apps when conducting counts. For now, the motto is: only copy observations of birds that you yourself have also determined as that species.

Training algorithms

Stating that there is much to improve in recognition algorithms is one thing, improving those algorithms is another. Algorithms must be trained to make them better. For example, you can repeatedly give sound clips of a Eurasian Blackcap with the comment that it is that species. Based on that, the algorithm learns to recognize the patterns of the Blackcap's song. Or maybe it was a Garden Warbler after all? It takes a lot of time for the algorithm to learn these subtle differences.

When training algorithms, many hands can make the work easier. Throughout Europe, citizen science initiatives are emerging in which volunteers can help with the input of bird sounds. For example, volunteers can help determine bird sounds in the Finnish project *Bird Sounds Global*. Within the European Bird Census Council (EBCC), a working group has been started to bring together European initiatives.

More species together

In 2022, next to bird counts, sound recordings by AudioMoths were also made at multiple points for the Farmland Bird Survey (Meetnet Agrarische Soorten). Field staff listened to these recordings and prepared species lists for each counting point. Student Niels van Harten then analyzed the recordings and validated them with four different algorithms, also called classifiers. The results were disappointing. Species such as Garden Warbler, Eurasian Skylark and Chiffchaff were almost always picked up flawlessly, but with species such as Blackbird and Eurasian Coot the classifiers had great difficulty. The performance could be improved slightly by training the best classifier with sound recordings of only Dutch species from Xeno-canto, especially when recordings were included with 'secondary species' on them - that is, if on the recording another species sings in addition to the target species, which was also identified. This suggests that the classifiers can be further improved by training them with sound recordings that more closely resemble the situation in the field; i.e. with multiple species and also other sounds (noise, car, dog, ...). For now, it remains important to monitor the results of classifiers carefully.



∧ Eurasian Skylark. Photo: Caroline van Oostveen

Male Eurasian Woodcock forage slightly less at night than during the day, a surprising result of the transmitter project. Photo: Thijs Glastra

Habitats for the Eurasian Woodcock

Eurasian Woodcocks like to nest on the soil of moist, varied deciduous forest, which makes the species a unique wader. About 4% of the Dutch population breeds in the loamy forests of Het Groene Woud in Noord-Brabant. Until recently, we knew very little about the daily habits of these Woodcocks.

Already in the distant past, parts of loam forests were cleared for timber production and to make room for agriculture. As a result, the forests of Het Groene Woud have become fragmented. Moreover, agriculture has contributed to the desiccation and acidification of the once balanced soil. Loam forest, also called oak-hornbeam forest because of its dominant tree species, is a rare forest type protected under European legislation but of which less than 20% is protected in the Netherlands. The loamy soil retains moisture and is rich in nutrients, ensuring a high biodiversity.

Conversion

On behalf of the province of Noord-Brabant, nature organizations are working on restoration projects in Het Groene Woud and agricultural land is being converted to nature. They are also working on ecological connections between the forests and counteracting desiccation through improved water management. With such large-scale interventions in the landscape, it is essential to consider possible effects on characteristic species, such as the Eurasian Woodcock, and their preferred habitat. Therefore, research was conducted during the breeding season of 2023 and 2024 on the habitat preferences of Woodcock in Het Groene Woud.

Transmitters

During the two breeding seasons, fifteen Woodcocks, fourteen males and one female, were fitted with GPS transmitters on their backs. For five weeks, the transmitters recorded their locations every hour at night and six times during the day.



GPS-locations of individual 56940 in 2024, at daytime (yellow) and nighttime (blue).

The birds' activity (acceleration values per minute) was also mapped. Within the area these Woodcocks used, the so-called home range, food availability and vegetation structures, among other things, were examined. To predict which parts of the area Woodcocks can use, the collected GPS data and maps with area characteristics were combined to show suitable habitat in a map. It should be noted that only one female was tagged during this study, which subsequently disappeared and therefore did not provide GPS locations. Females probably exhibit different behaviour to males during the breeding season, and hence, the search results are about terrain use by males.

Habitat mosaic

Woodcock males appear to use a different habitat at night in Het Groene Woud than during the day. During the day they reside in dense woodlands with a well-developed tree and bush layer. It was expected that the birds would forage mainly at night, but apparently the coverage of the forest not only provides silence and security but is also suitable for foraging for food during the day. A rich structure and an easily digestible, nutrient-rich layer of litter therefore seem important. It is also noteworthy that the birds were more active during the day than at night. At night they foraged very locally and were not very active, while during the day they travelled greater distances within the forest plots and showed higher levels of activity.

At night, Woodcocks flew to nearby open grasslands, presumably to forage. Woodcocks were faithful to specific foraging locations within these grasslands and repeatedly visited the same sections. They visit grasslands with soft rush more frequently, indicating that these sites are extensively managed and therefore probably have higher food availability and accessibility than surrounding (production) grasslands or fields.



Average activity (the overall dynamic body acceleration, ODBA) per hour for individual 56940 in 2024. Grey shows activity during morning and evening flights, yellow during intermediate hours and blue between evening and subsequent morning flights.

Movements

The daily movements of the Woodcocks studied were mostly limited to short distances between the forest plots and grasslands, with about 550 metres distance between day and night locations. Sporadically, they travelled longer distances well outside the loamy forests. The home range of the average Woodcock was over 60 hectares. It was also found that the presence of buildings within a three-kilometre radius negatively affected the occurrence of the species both during the day and at night, indicating a strong sensitivity to disturbance.

Preferences

Although nature management in Het Groene Woud focuses on forest expansion, complete reforestation will limit the foraging possibilities of Woodcocks too much. The species actually benefits from variation: a combination of structurally rich woodlands with a well-developed tree and bush layer, and open, moist fields with loamy soil. The ideal forest area has a minimum size of 60 hectares, where the birds can easily shuttle between forest and grassland within 500 meters. Therefore, in addition to forest expansion, maintaining extensively managed grasslands is important. Limiting construction in the immediate vicinity to minimize disturbance is also likely to benefit the species.

> Woodcock nest on the forest floor and can be difficult to detect, as can be seen by this nest found by chance. Photo: Piet Schermerhorn

Common Kestrel Photo: Thijs Glastra



2025 is the Year of the Common Kestrel

Its remarkable way of foraging makes the Common Kestrel stand out in the field or along roads. However, this hovering falcon is being seen less and less. In 2025, together with several other organizations, Sovon is calling attention to this vole-eater, which is highly dependent on nesting sites and the food situation in farmland.

For a long time, the Kestrel was the most numerous bird of prey breeding in the Netherlands, but nowadays the Common Buzzard occupies this position. The latest Bird Atlas describes a decline of 75% since the middle of the last century. Particularly on sandy soils, the occurrence of Kestrels has very much been reduced. National numbers declined around 1960 due to the use of toxic agrochemicals but then they re-established themselves. Since about 1990, however, they have been steadily declining again, with small temporary rebounds in vole-rich years. Increasingly intensive use of land makes large areas of farmland unsuitable for Kestrels.

Common voles

Although Kestrels are perfectly capable of catching prey such as the field mouse and bank vole, their diet consists mainly of common voles. The number of Kestrels is therefore strongly influenced by peaks that occur in common vole cycles. Rodents, in fact, exhibit multi-year population fluctuations in which years of growth and decrease switch with some form of regularity. Based on agricultural records, it is known that before 1956 peaks of common voles had a regular three-year character. Thereafter, this regularity disappeared, particularly during the 1980s. In the early 1990s, the three-year cycle returned somewhat. Four peaks are now visible in the 21st century: 2004/05, 2007, 2014/15 and 2019/20, with peaks sometimes being strongly regionally. Looking at the breeding bird trend of the Kestrel, we see rebounds in 2005, 2008, 2016 and 2020, all immediately following a common vole peak. However, the density of common voles during peak years is not everywhere what it was before. Although recent common vole peaks provide more breeding Kestrels in the short term, this does not seem to be enough to stop the decline.

More voles, more young

The fluctuations in the number of common voles are not only visible in the numbers of Kestrels, but also in their breeding success. The start of egg-laying appears to depend strongly on the severity of the winter preceding the breeding season. After a harsh winter, common voles are less available, and Kestrels delay their egg-laying. In vole-rich years, the Kestrel starts breeding early and the clutches are also larger (see also page 15). This investment turns out to be a good strategy: per successful nest, many young fledge, and they get fed plenty of common voles. In peak years, the average can reach almost five young per successful nest, while in off-peak years it is less than four.

Where do Kestrels forage?

When the abundance of common voles is low, Kestrels must switch to other prey or shift their foraging area. Hovering Kestrels are often seen along roads. There are large common vole concentrations on the (often) dry sandy verges of a road, but there is also a higher change of collision. To get a picture of the distribution along roads, we are organizing the 'Where does the Kestrel forage?' census as part of the Year of the Common Kestrel. Of course, this census is set up in a way that participants can conduct it safely.

Following this census, it is also interesting to know what Kestrels eats when few common voles are available. For this we are developing several activities, such as the analysis of pellets of the Barn Owl (Kestrels digest the bones of voles, therefore analysis of their pellets is not useful) and the analysis of camera images from *Embrace the Spring (Beleef de Lente)* and nesting cameras from private individuals. The Dutch Mammal Society's (Zoogdierenverening) 'Year of the Vole' in 2025 offers opportunities to collaborate and encourage dispersal studies of voles (including the common vole).

All-time low for the Black-tailed Godwit

2024 marked a low point for breeding Black-tailed Godwits. Only an estimated four thousand young were raised. In summer, remarkably few young birds were counted at gathering areas. Research using colour-ringing shows the ups and downs of the declining population.

Throw a handful of thirty white marbles into a jar containing many more black marbles, shake vigorously for a moment before reaching in and pulling out a handful of marbles. Based on the amount of white marbles in your hand, you can then estimate how many black marbles are in the jar. In short, this is the method we have used to estimate the number of young Black-tailed Godwits fledged every year since 2012. Since it is known how many young Black-tailed Godwits are colourringed each spring for research by the University of Groningen, counts of juvenile birds with and without rings can be used to estimate the number of young that grew up. After three slightly more favourable years, the estimate of four thousand young in 2024 is a low point in the series.



Estimated numbers of fledged godwit chicks in Friesland and other parts of the Netherlands in 2012-2024. The blue vertical lines show the 90% confidence interval of the national total estimate. The orange line indicates the approximate number of young that must fledge to keep the Dutch population stable. This line decreases as the breeding population is declining.

Low survival rate

Initially the season started positively: Black-tailed Godwits returned early to their breeding grounds and in many places the number of pairs was somewhat higher. However, wet spring weather caused problems. Rainfall can cause hypothermia in chicks and a reduced food supply due to reduced insect activity, causing chicks to die faster. There were also few mice, causing mouse-eaters, such as mustelids, to switch earlier to other food sources, including bird nests on grasslands. In survey areas in Friesland, the number of successful nests was very low. Apart from these annual effects, the intensive agricultural use of large areas of grassland continuously takes its toll and many casualties occur during mowing, for example. The chances of survival for young Black-tailed Godwits are too low in almost all years and in many areas.

Searching for groups

In the summer, young Black-tailed Godwits gather with adult birds in areas of shallow water. They forage to fatten up before the autumn migration. Every year between 20th of June and 10th of August, volunteers under the direction of Gerrit Gerritsen search for groups of young birds and count the number of birds with and without rings. This summer a total of 248 samples were taken, including checks of presumably the same birds. Then these double counts were taken out as much as possible. The results were also split by Friesland, where proportionally many Black-tailed Godwits breed and where most chicks are ringed, and the rest of the Netherlands. The analysis (commissioned by Vogelbescherming) shows that 2024 represents a low point in the range after the three more favourable years. An estimated 26,000 - 27,000 breeding pairs of the Black-tailed Godwit are still breeding in the Netherlands. To maintain the population at that level, three times as many young should have been raised compared to the number of young this year. Unfortunately, it seems that time is running short for our national bird.

> « Juvenile Black-tailed Godwits. Photo: Astrid Kant

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Thank you for all your effort

Without the efforts of thousands of volunteers, this State of Birds could not have been compiled. Many have dedicated themselves for years by conducting bird counts, ringing birds and searching for nests. By collecting data in a structured and detailed manner, we are able to compare time series on a national and international scale. This information is indispensable for nature policy choices and for better protection of birds. They are the indicators of our nature.

More than fifty years ago, in 1973, the fieldwork for the first Dutch Breeding Bird Atlas (Atlas van de Nederlandse broedvogels) marked the start of Sovon. More and more birders are contributing to a clear picture of the occurrence of birds in the Netherlands and the changes associated with it. This State of Birds shows just some of the information that is becoming available thanks to them. We are grateful for the selfless efforts of all volunteers, coordinators and validators. We also thank the local bird clubs, species groups, individual researchers, institutes and area managers for their valuable and pleasant cooperation. Without these joint efforts, we would not know the state of birds in the Netherlands.

> sovon.nl/tellen



∧ Photo: Marcel van Kammen

References

Scan the QR-code to see the references or go to: sovon.nl/bronnen-vogelbalans-2024



Colophon

The State of Birds in the Netherlands is an annual publication by Sovon in which we provide insight into the status and trends of bird species. In addition to this State of Birds, we publish several reports each year in which we share results of projects, which can be found at pub.sovon.nl.

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What is the State of Birds in the Netherlands?

In the State of Birds, Sovon lists the current most important developments. Which species are increasing, and which are increasingly rare? Thanks to more than 50 years of counting and research by many volunteers and professionals, we can make statements about the trends of 200 species of breeding birds and 204 migratory and wintering bird species. The causes behind these changes are also explained. This 2024 edition focuses on several striking and recent developments. In forests, the large differences between the trends of breeding birds of deciduous or coniferous trees stand out. Not only is suitable habitat important, but weather conditions also play a role. For example, heavy spring rainfall affected the breeding performance of several species. Research on Eurasian Woodcock takes the daily habits of this wader out of the shadows and underlines the importance of a diverse landscape with nutrient-rich soil. Birds remain important indicators of how we interact with nature.