

**COMPLAINT
TO THE EUROPEAN COMMISSION
CONCERNING FAILURE TO COMPLY WITH COMMUNITY LAW**

regarding

the infringement of Germany of Article 2
of the EU Birds Directive (DIRECTIVE 2009/147/EC),

as it has failed to maintain or achieve an adequate population level of the
Grey Partridge (*Perdix perdix*)



Family of Grey Partridges, Photo: Christian Gelpke

Submitted by NABU, 2 October 2020



Grey Partridge, Photo: Christian Gelpke

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1 **COMPLAINT**
2 **TO THE EUROPEAN COMMISSION**
3 **CONCERNING FAILURE TO COMPLY WITH COMMUNITY LAW**
4

5 **1. Surname and forename of complainant:**

6
7 NABU - Naturschutzbund Deutschland
8

9 **2. Where appropriate, represented by:**
10

11 Jörg-Andreas Krüger, President
12

13 **3. Nationality:**
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15 German
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37 **6. Field and place(s) of activity:**
38

39 NABU is the German partner of BirdLife International. It is one of the oldest (founded
40 1899) and the largest wildlife charity in Germany. It is being supported by over 770,000
41 members and supporters (of these almost 700,000 regular members) and around 36,000
42 active volunteers.

1 With its foundation in bird conservation, the organisation is now active in a wide field of
2 topics relating to nature conservation and environmental protection. Most of NABU's
3 activities focus on Germany, but NABU also runs international activities promoting
4 nature conservation in regions like the Mediterranean, Central Asia, the Caucasus and
5 Africa. In cooperation with BirdLife International, in particular BirdLife Europe, NABU
6 is also engaged in European policies relating to nature conservation and the environment.

7 NABU takes credibility from using an evidence-based approach to nature conservation. It
8 engages in the collection and analysis of relevant environmental data, the development of
9 possible solutions for existing problems and in policy and media work to support their
10 implementation. At the same time, to a large extent through its around 2000 local groups
11 and 16 regional representations (including its independent partner organisation LBV,
12 which is representing NABU in the German Land Bayern), NABU actively implements
13 nature conservation work. NABU also manages over 200,000 ha of land for nature
14 conservation, part of these through the NABU-foundation "Stiftung Nationales
15 Naturerbe".

16 Especially relevant to the matter of this complaint are the following aspects of NABU's
17 work:

18 NABU has supported the implementation of the EU Birds Directive since its beginnings.
19 As German partner of BirdLife International, NABU has developed and published the
20 inventory of Important Bird Areas (IBAs) for Germany, which served as a reference for
21 the designation of Special Protection Areas for Birds (SPAs) in Germany. NABU has
22 promoted the process of SPA designation by filing complaints about insufficient
23 designations of SPAs by Germany with the EU Commission (mainly case 2001/5117,
24 closed on 29/10/2009).

25 The future of farming and farmland birds are a special area of expertise of NABU.
26 Several scientific reviews implemented and/or commissioned by NABU have shed light
27 on the dire situation of farmland birds and how to revert their declines (e.g. NABU 2007,
28 NABU 2013, Hötter & Leuschner 2014).

29 NABU is actively advocating for a reform of the EU's Common Agricultural Policy
30 (CAP) towards a nature-friendly farming system. To this end, NABU has prepared a
31 number of studies listed under: <https://www.nabu.de/natur-und-landschaft/landnutzung/landwirtschaft/agrarpolitik/eu-agrarreform/studien/index.html>
32 (e.g. Oppermann & Schraml 2019).

34 Currently, NABU is involved in an international EU-funded INTERREG-Project
35 "PARTRIDGE" that is developing and testing the most effective conservation measures
36 for Grey Partridges (see <https://northsearegion.eu/partridge/>). The expertise compiled by
37 this project about the threats and the effectiveness of conservation measures for the Grey
38 Partridge is forming an important basis for this complaint.

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7. Member State or public body alleged by the complainant not to have complied with Community law:

Germany.

In Germany, the responsible authority overseeing the national implementation of the EU Birds Directive is the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMU).

According to national legislation, most of the responsibilities for nature conservation issues are devolved to the 16 German regions (Länder). Their regional environment ministries therefore hold the majority of the executive powers in the areas concerned by this complaint.

8. As far as possible, specify the provisions of Community law (treaties, regulations, directives, decisions, etc.) which the complainant considers to have been infringed by the Member State concerned:

With this complaint, NABU shows that Germany breaches Art. 2 Birds Directive (see lit a.), and by this also the more concrete provisions of Art. 3.1 and 3.2 Birds Directive (see lit. b.). NABU also refers to Art. 4 of the EU Birds Directive (see lit. c.). Overall, the complaint is of general importance and well-founded. The Commission is hence urged to take further measures against Germany on it (see lit. d.).

a. The complainant considers that Germany has infringed Art. 2 of the EU Birds Directive (DIRECTIVE 2009/147/EC):

Article 2

Member States shall take the requisite measures to maintain the population of the species referred to in Article 1 at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level.

as it has failed to maintain or achieve an adequate population level of the Grey Partridge (*Perdix perdix*) since this directive came into force in 1979 (for western Germany) resp. 1990 (for eastern Germany).

In that context, NABU stresses that from Art. 2 Birds Directive the obligation arises to restore or maintain the bird population at a favourable conservation status. While being aware that there is no direct mentioning of the concept of “Favourable Conservation Status” (FCS) in the Birds Directive, it is well known that FCS can be applied in the same way to Birds as to Habitats Directive species. The European Commission has

1 confirmed this analogue application, too (see for example the Commission “Guidance on
2 Hunting under the Birds Directive”, paragraph 2.4.14, footnote: "Whereas the term
3 ‘favourable conservation status’ is not mentioned explicitly in the Directive (was
4 introduced in 1992 in the Habitats Directive) it is implicit from the requirements of
5 Article 2 of the Directive.” (European Commission 2008).

6
7 b. The failure to comply with this provision can be shown to be caused by infringements
8 of a further article of the same directive, namely:

9 *Article 3*

10 1. In the light of the requirements referred to in Article 2, Member States shall take the requisite
11 measures to preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species
12 of birds referred to in Article 1.

13 as it can be shown that the area of habitats currently available for the species in question
14 is insufficient to maintain or achieve an adequate population level and decreasing. At the
15 same time, the measures taken by Germany to preserve, maintain and re-establish a
16 sufficient area of habitat are insufficient. Therefore Germany also infringes:

17 *Article 3*

18 2. The preservation, maintenance and re-establishment of biotopes and habitats shall include primarily
19 the following measures:

20 (a) creation of protected areas;

21 (b) upkeep and management in accordance with the ecological needs of habitats inside and outside the
22 protected zones;

23 (c) re-establishment of destroyed biotopes;

24 (d) creation of biotopes.

25 which specifies the measures to be taken to preserve, maintain and re-establish a
26 sufficient area of habitat, which as specified in Art. 3.2(b) applies equally inside and
27 outside of protected areas. It can be shown, that none of the four listed types of measures
28 are implemented to a sufficient extent to ensure preservation, maintenance and re-
29 establishment of a sufficient area of habitat.

30
31 c. The species in question is not listed in Annex I of the Birds Directive and is not a
32 migratory species. So, the provisions of Article 4 requiring special conservation
33 measures and the designation of special protected areas beyond the ones required by
34 Article 3 do not apply. Still, the designation of special protected areas (SPAs) for other
35 bird species could potentially fulfil the requirements of Article 3, so the contribution of
36 SPAs to the conservation of the Grey Partridge will also be discussed.

37
38 d. As it can be shown, that insufficient area and quality of breeding habitat are the
39 decisive reasons for the inadequate population levels of the species in question and for its

1 continuing decline, the requisite measures taken by Germany for this species are
2 insufficient. Germany hence did not take the requisite measures as foreseen by the Birds
3 Directive. The available complaint is well-founded. It is also of general importance and
4 does not only refer to an individual case. The complaint covers insufficient measures of
5 the different authorities of the “Länder” and the federal state. It is about the systematic
6 failure of Germany to protect this key species, all over its territory. Also, similar failures
7 could be shown for various other bird species, e.g. for the four meadow-breeding wader
8 species Lapwing, Curlew, Snipe and Black-tailed Godwit covered by a pending
9 complaint submitted by NABU in 2014 and registered under CHAP (2014) 01471. As the
10 present complaint concerns a systematic failure of the implementation of the Birds
11 Directive, the Commission is urged to take further measures against Germany on this
12 complaint.

13 This complaint concerns a similar matter as case C-117/00 of the EC against Ireland
14 regarding insufficient measures to protect the Red Grouse in a blanket bog SPA in
15 Ireland resulting in overall decline and decrease of distribution of Red Grouse, which
16 was ruled by the CJEU in 2002. An important difference is however, that this complaint
17 refers to national populations and deteriorated and diminished habitats on a national level
18 and thereby also concerns the question of the target population level that is to be
19 achieved on the level of a member state for all bird species referred to by Article 1 of the
20 Birds Directive.

21

1 9. **Fullest possible account of facts giving rise to complaint:**

2 9.1. Rationale of the complaint

3 As outlined in chapter 8 of this document, this complaint concerns the fact that Germany
4 infringes articles 2 and 3 of the EU Birds Directive as it has failed to maintain or achieve
5 an adequate population level of the Grey Partridge (*Perdix perdix*), a typical farmland
6 bird species, since this directive came into force in 1979 (for western Germany) resp.
7 1990 (for eastern Germany).

8 The Grey Partridge thereby stands as a typical representative of farmland birds, which as
9 a group experience the biggest declines of any birds in Germany (Gerlach et al. 2019).
10 While the same infringements apply to a large number of other farmland bird species in
11 unfavourable conservation state, this species has been chosen as the subject of this
12 complaint as it represents the most clear-cut case for the following reasons:

- 13 - The species shows the second strongest decline of any bird species in Germany
14 since the Birds Directive came into force.
- 15 - Hunting bag statistics allow an especially solid reconstruction of past population
16 levels.
- 17 - This formally common and numerous species is still distributed all over Germany
18 and therefore can represent the situation in the whole country rather than only in
19 certain parts of the country.
- 20 - The species lives in typical farmland habitat like actively farmed fields rather
21 than in marginal farmland habitats, therefore representing the bulk of farmland
22 habitat rather than special niches.
- 23 - The species is extremely sedentary, so that the reasons for declines cannot lie
24 anywhere else than in the respective breeding areas.
- 25 - The species is very well studied, so that the reasons for declines are well known,
26 as well as the necessary type and amount and costs of conservation measures.
- 27 - Conservation measures benefitting the Grey Partridge would be beneficial to a
28 host of other farmland bird species, therefore not being restricted single-species
29 conservation measures.
- 30 - There is a realistic prospect to implement the necessary conservation measures on
31 the necessary scale through a) a reform of the Common Agricultural Policy
32 (CAP) of the EU and b) through national and regional programming of the CAP

1 in Germany c) through other nationally funded conservation programmes or
2 ultimately d) through regulatory measures.

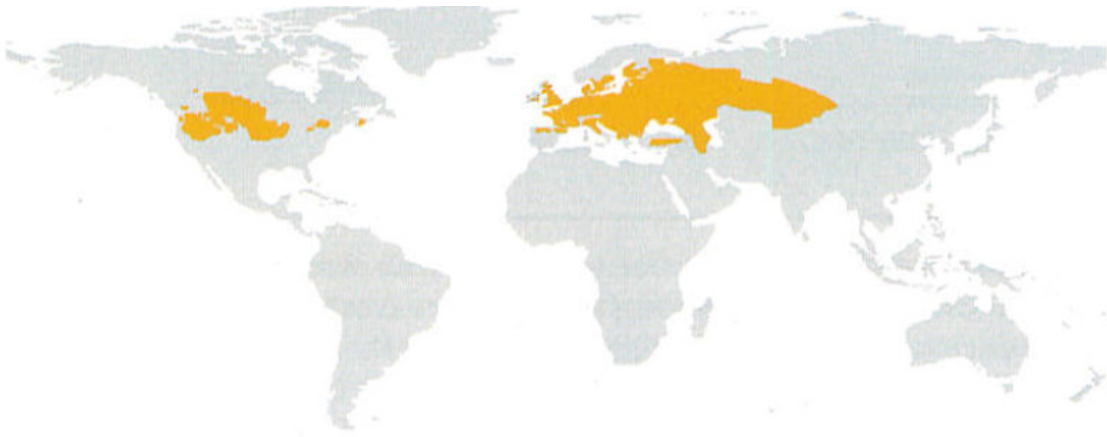
3 This complaint is aimed to complement a pending complaint submitted by NABU in
4 2014 regarding the failure to achieve adequate populations levels for four meadow-
5 breeding wader species (Lapwing, Curlew, Snipe and Black-tailed Godwit) (CHAP
6 (2014) 01471). The difference between these complaints is that the species of CHAP
7 (2014) 01471 are migratory and that they are inhabitants of a rather rare special type of
8 farmland habitat, wet meadows.

9 The purpose of the account in this chapter is to provide evidence that:

- 10 - the national populations and the distribution of the species concerned are not
11 meeting adequate levels according to Article 2 of the Birds Directive in Germany
12 and are declining,
- 13 - that these declines are mainly caused by deterioration of the breeding habitat,
- 14 - that measures are available to halt and reverse the decline of the species concerned,
15 and
- 16 - that these measures have not been used to a sufficient extent to date.

17 9.2. Biology of the species

18 The Grey Partridge is a compact ground-dwelling bird of the order Galliformes (about 30
19 cm body length and 400 g body weight). The breeding distribution of the Grey Partridge
20 is large and continuous in temperate regions from Western Europe to Mid Asia. The
21 species is introduced to North America (Fig. 1). Males and females have a similar
22 plumage, in males with a more prominent chestnut-brown horse-shoe mark on the breast,
23 in females with two transverse bars on the tertiary coverts. In Germany two subspecies
24 were described: *Perdix perdix perdix* and *Perdix perdix sphagnetorum*, the latter (a
25 north-western subspecies, specialized on heathland) being already extinct.



1

2 Fig. 1: Global distribution of the Grey Partridge, native in Europe and Asia and introduced to North
 3 America. Source: Gedeon et al. (2014).

4 Grey Partridges feed, nest and roost on the ground. Partridges live in open habitats and
 5 fossil records are known from Western Europe long before agriculture appeared, 475.000
 6 years ago (Potts 2012) and also from the bronze age. It can be reasonably assumed that
 7 the species has been native to Germany ever since with the possible exception of some
 8 southward replacement during the height of glaciations periods. As Germany was never
 9 fully covered by forests, there will always have been sufficient open habitat, including
 10 such maintained through the grazing of large herbivores, to maintain a population of
 11 Grey Partridges even before the arrival of human agriculture. With agriculture, a new
 12 favourable habitat was created and cropped farmland held the highest densities of
 13 partridges. Small scale farmland with a high diversity of crops and a good proportion of
 14 permanent structures (field margins, fallow land, hedgerows) is the optimal habitat. All
 15 farmland areas in Germany were densely populated by partridges, apart from higher
 16 elevations.

17 Partridges live in pairs or families, and birds without breeding success form small groups
 18 from late summer on. Both types of groups are called coveys. New pairs are formed at
 19 the end of the winter, older couples mostly stay together. At that time the coveys break
 20 up and the males call at dusk and dawn to get contact to other partridges. Although
 21 partners come together early in the year, the partridge breeds late. Egg laying in German
 22 populations is in May and June. The average size of the first clutch is 16-17 eggs. Laying
 23 the large clutch takes the female about three weeks. The nests are situated in cereal fields,
 24 meadows, grassy margins and other uncropped vegetation. The female incubates about
 25 24 days and the hatching of most clutches is in July. The male does not incubate the
 26 clutch but is guarding the nest. The pair raises the chicks together. During the course of a
 27 year, partridges prefer different structures providing food and cover within the farmland
 28 habitat. In spring and summer the pairs have a strong preference for insect-rich,
 29 unsprayed vegetation. Nowadays, that is mainly uncropped habitat patches. In winter,
 30 cover can be provided by fallow land, cover crops, oilseed rape, hedges etc. During

1 periods with snow cover of more than a few centimeters, woody structures with good
2 ground cover (low shrubs) give partridges the best protection against predators.

3 Food is mainly plant material (leaves and seeds of weeds and crops), but during spring
4 and summer, a high amount of arthropods and other small animals are taken, especially
5 by the female. Males feed a part of the detected invertebrates to their female. Chicks are
6 totally dependent on protein-rich food, especially insects, during their first weeks of life.
7 Ants (especially larvae and pupae) are a preferred food, if available. During winter, the
8 leaves of winter cereals and oilseed rape are the most important food.

9 Compared to other birds, the mobility of partridges is very low. No migration over any
10 longer distances occurs in Central European Grey Partridges. Even during unfavourable
11 winter conditions the partridges never move more than a few kilometres. Mobility is
12 highest in March and April: Single partridges are reported to move about 20 km
13 (Gottschalk & Beeke 2014; Olesen 2017), but median movement distance is about
14 1,7 km for males and 1,2 km for females (Gottschalk & Beeke 2014). Olesen (2017)
15 detected movement of 22 km in a female, which is the maximum value described in
16 literature. Other studies detected even lower mobility (Carroll et al. 1995; Kaiser &
17 Storch 2006; Novoa et al. 2004). Pairs with small chicks have a homerange of only a few
18 hectares (Buner et al. 2005; Novoa 2004).

19 Mortality in partridges is high, mostly due to predation. The peak of annual mortality is
20 the predation of females during incubation. That is the reason why the sex ratio in
21 partridge populations is shifted toward males. For females, winter mortality usually is
22 lower than summer mortality, but periods of high snow cover increase the daily mortality
23 risk fivefold (Gottschalk & Beeke 2014). The annual mortality of adult birds has been
24 determined at 58% by Aebischer et al. (2004). High reproduction (one of the largest
25 clutches in birds worldwide) is an adaptation of the species to compensate for naturally
26 high mortality that works well under good habitat conditions. In a German study area
27 near Göttingen in Lower Saxony, pairs with a successful brood can be observed in
28 autumn family groups with an average of 7 young birds, but the majority of breeding
29 attempts fail (Gottschalk mdl. 2020). The overall annual productivity figure therefore is
30 best illustrated by the results of Aebischer et al. (2004), who found an average annual
31 productivity of 1.9 chicks per spring pair in landscapes with full pesticide application and
32 3.3 chicks per spring pair in landscapes with untreated field margins.

33 Partridges have naturally strong population fluctuations, with population crashes
34 occurring after winters with high and long-lasting snow cover. Unfavourable weather
35 (periods with heavy rain), especially in July, can cause serious brood losses and therefore
36 also temporary declines. Under favourable habitat conditions, partridges can recover
37 from such declines very quickly. The doubling of population size within one year
38 belongs to the typical characteristics of a healthy population after previous weather-

1 driven declines. Small local populations experience even higher population fluctuations
2 due to additional local factors. Hence, small local populations without connection to a
3 wider landscape populated by partridges are especially at risk of extinction.

4 9.3. Distribution and population size and their trends

5 *The European perspective*

6 The European population of the Grey Partridge is estimated at 1.380.000 – 2.670.000
7 pairs. Three quarters of the European population is concentrated within the EU. In the
8 EU27 the population is 1.030.000 – 2.030.000 pairs based on the national reporting cycle
9 of 2013 (Bird Life International 2015). A summary of national reporting data of the
10 reporting cycle of 2019 available under
11 [https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-12-](https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-12-national-summary-dashboards)
12 [national-summary-dashboards](https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-12-national-summary-dashboards) for 23 of 27 EU countries at the time of writing suggests
13 an EU27 population of only 725.000 – 989.000 pairs, which would mean a massive
14 decline of 26 to 37% in just six years. Only countries at the northern edge of the
15 distribution (Finland, Latvia and Sweden) report higher numbers than 2013, Estonia and
16 Bulgaria report the same numbers as 2013, all other EU countries report declines.

17 The European Red List Assessment (BirdLife International 2015) based on the 2013
18 reporting cycle of national reports shows overwhelmingly declining national trends for
19 European countries both in the short term (12 years) as well as the long term (25 years),
20 see Fig. 2 and 3.

21 Fig. 2 and 3: Legend for the symbols used in Fig. 2 and 3:

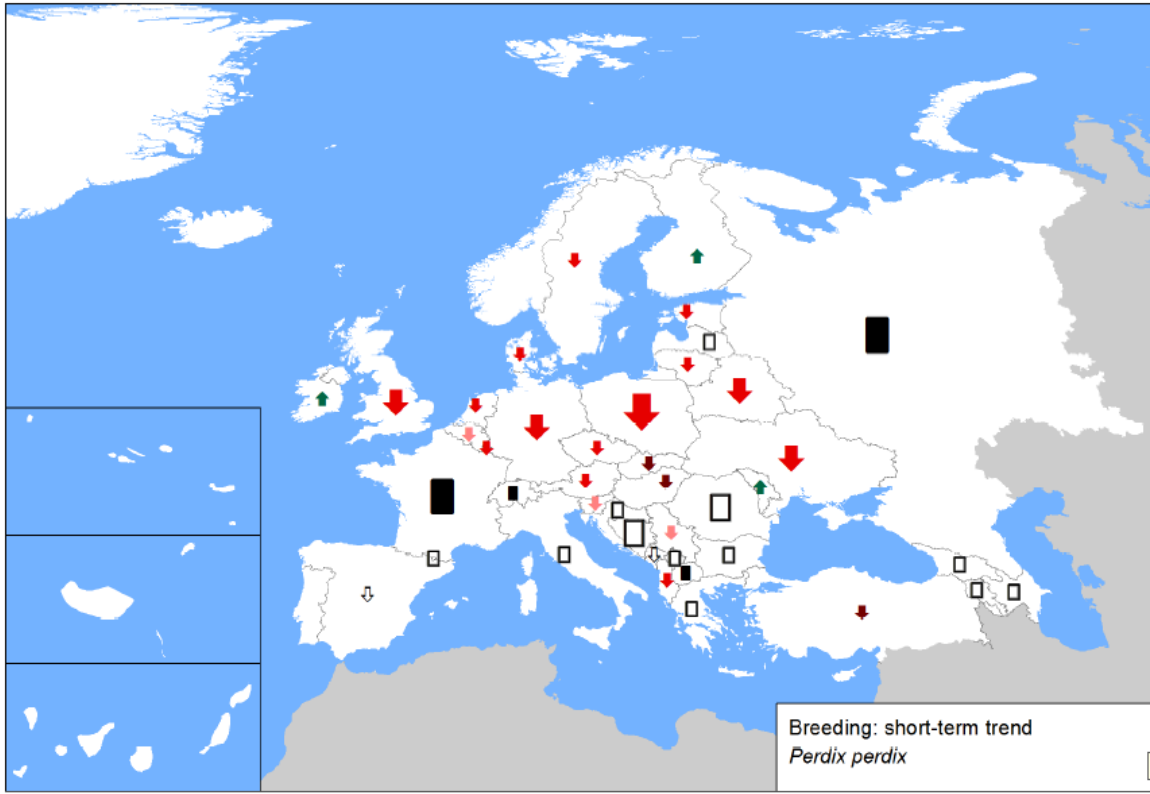
KEY

- | | |
|---|---------------------------------|
| ↑ Large increase (≥50%) | ↓ Large decrease (≥50%) |
| ↑ Moderate increase (20–49%) | ↓ Moderate decrease (20–49%) |
| ↑ Small increase (<20%) | ↓ Small decrease (<20%) |
| ↑ Increase of unknown magnitude | ↓ Decrease of unknown magnitude |
| ■ Stable or fluctuating | |
| □ Unknown | |
| ○ Present (no population or trend data) | |
| × Extinct since 1980 | |

Each symbol, with the exception of Present and Extinct, may occur in up to three different size classes, corresponding to the proportion of the European population occurring in that country.

- ↑ Large: ≥10% of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small: <1% of the European population

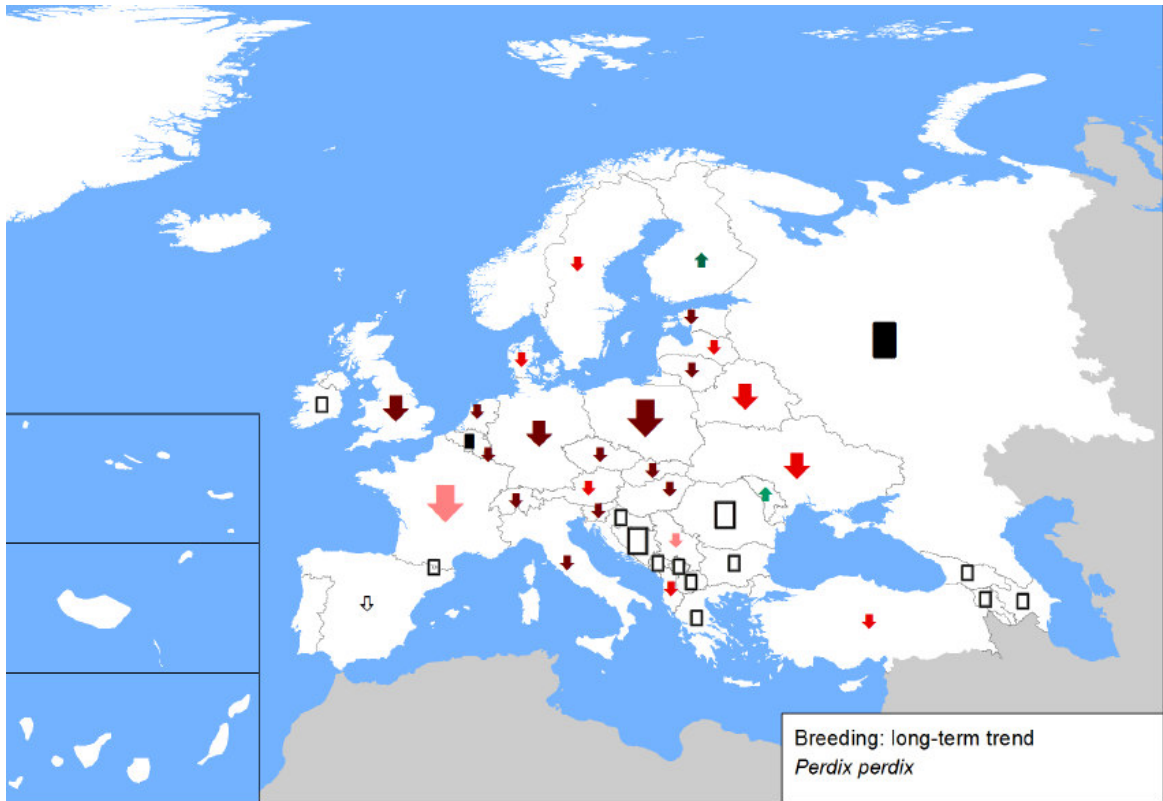
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2 Fig. 2 : National European population trends of the Grey Partridge, short-term trend (12 years) reported in
 3 2013. Source: BirdLife International (2015)

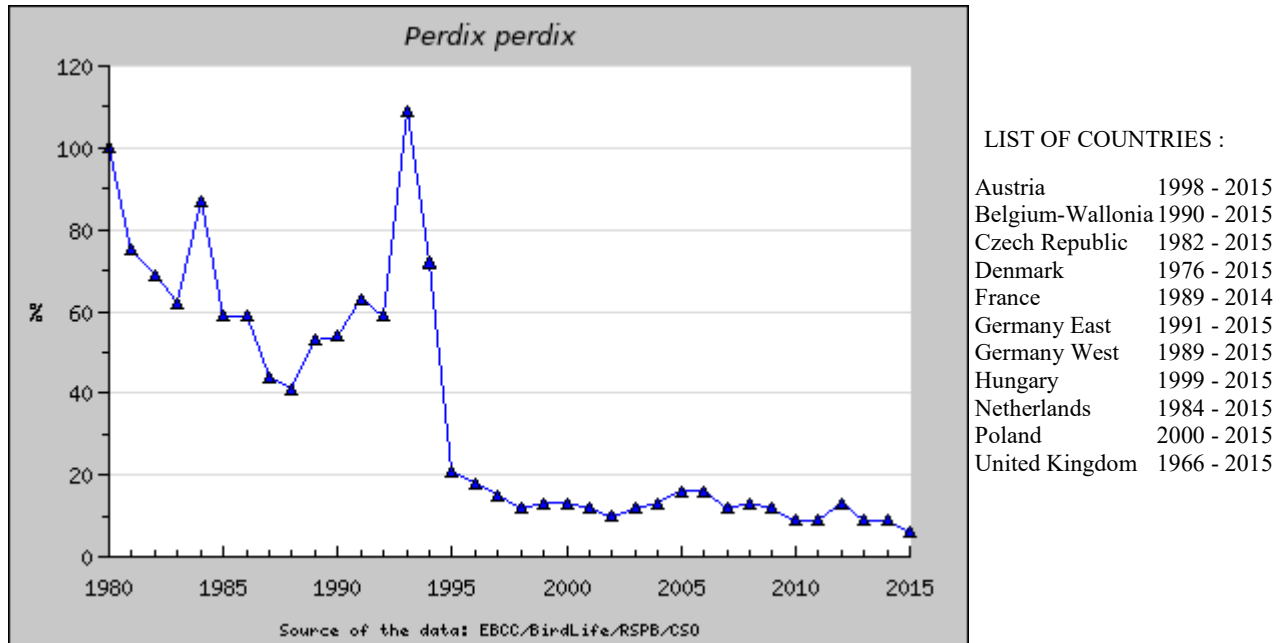
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6 Fig. 3 : National European population trends of the Grey Partridge, long-term trend (25 years) reported in
 7 2013. Source: BirdLife International (2015)

1 The European Bird Census Council (EBCC) provides an EU population trend index for
 2 1980-2015, covering all the period since the EU Birds Directive came into force. It is
 3 based on systematic monitoring programmes in 10 EU countries with different starting
 4 dates. This EU monitoring trend shows a decline of 94% within 35 years between 1980
 5 and 2015 with 1.380.000 – 2.670.000 pairs remaining in 2015:



6
 7 Fig. 4 : EU population trend of the Grey Partridge 1980-2015 according to the Pan-European Common
 8 Birds Monitoring Programme (PECBM). Source: EBCC/BirdLife/RSPB/CSO 2019, available at
 9 http://www.birds.cz/pecbm/species.php?result_set=Publish2017&one_species=3670

10

11 *National population size and trend*

12 The current population size according to the national reporting of 2019 is estimated at
 13 21.000 to 37.000 breeding pairs for the year 2016. The short-term population trend
 14 (2004-2016) is a decrease of 52%. The long-term population trend (1980-2016) is minus
 15 91%. The latter figure illustrates the national population decline since the Birds Directive
 16 came into force.

17 In the previous round of reporting of 2013, the national population was still estimated at
 18 37.000 to 64.000 pairs for the year 2009 (Sudfeldt et al. 2013, Gedeon et al. 2014). The
 19 new 2016 population estimate is about 43% lower than the estimate given for seven years
 20 earlier (2009).

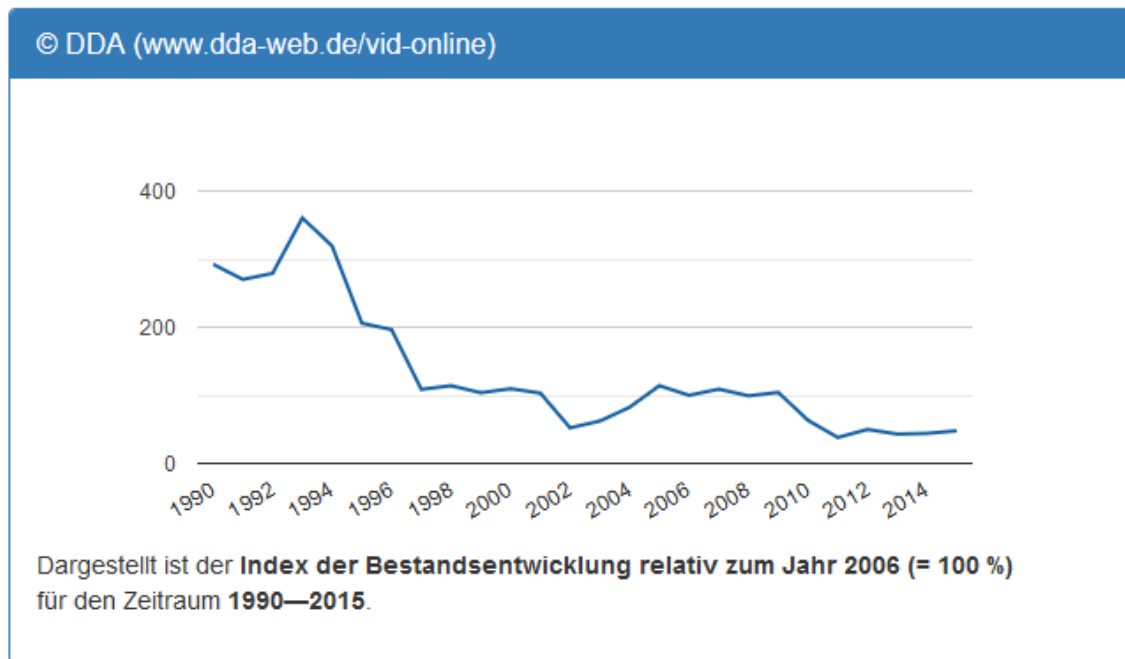
21 Tab. 1 shows the latest available published population figures for the German federal
 22 states. The respective reference years vary. The national sum suggests that these data
 23 largely refer to the same set of data reported in the 2013 national report, i.e. to the data
 24 collected during 2005-2009 for the German national breeding bird atlas. The species

1 occurs in all of Germany's 16 regions apart from the city-state of Berlin. The largest
 2 regional populations can be found in the north-western regions of Schleswig-Holstein,
 3 Niedersachsen und Nordrhein-Westfalen, as well as in the largest region by area, Bayern.

4 Tab. 1: Latest available regional population estimates of Grey Partridge for each federal state (the three
 5 city-states with at most marginal numbers left out).

(federal) state (from North to South)	Latest population estimates (pairs)	Source
Schleswig-Holstein	7800	Koop & Bernd 2014
Niedersachsen	7000 – 15000	Krüger & Nipkow 2015
	9300	WILD 2017
Mecklenburg-Vorpommern	750 – 1400	Eichstädt et al. 2006
	3000	WILD 2017
Nordrhein-Westfalen	7000	WILD 2017
Sachsen-Anhalt	500 – 2500	Frank & Schnitter 2016
	3.000	WILD 2017
Brandenburg	1.000	Ryslavy et al. 2011
	1200	WILD 2017
Hessen	4000 – 7000	VSW & HGON 2014
	4600	WILD 2017
Thüringen	900 – 1200	Frick et al. 2010
	1800	WILD 2017
Sachsen	200 – 400	Zöphel et al. 2015
	40	WILD 2013
Rheinland-Pfalz	1000 – 2000	Dietzen et al. 2015
	6.500	WILD 2017
Saarland	150 – 300	Süßmilch 2008
	400	WILD 2017
Baden-Württemberg	700 – 1500	Bauer et al. 2016
	2000	WILD 2017
Bayern	4.600 – 8.000	Rudolf 2016
TOTAL	35000-63000	

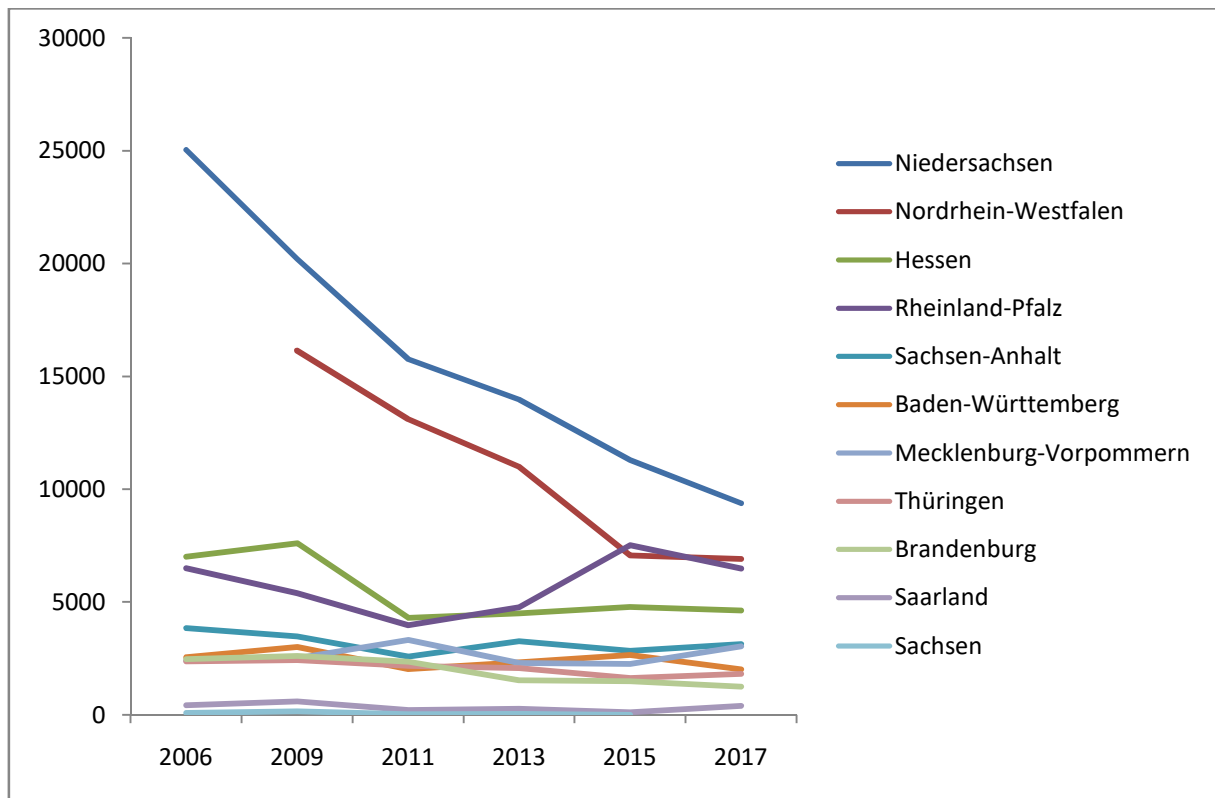
6 Since 1990, the Grey Partridge is part of the systematic national monitoring programme
 7 of common birds. Fig. 5 shows the population trend between 1990 and 2015. The species
 8 declined by 84% in this period.



1

2 Fig. 5: Development of the breeding population of the Grey Partridge in Germany according to the
 3 German national common bird monitoring programme 1990-2015. The population size of the year
 4 2006 is set at 100%. Source: Dachverband Deutscher Avifaunisten (2020)

5 For the Grey Partridge as a game species, a second national monitoring programme
 6 organised by the German Hunters Association (Deutscher Jagdverband (DJV)) exists
 7 since 2006. This monitoring programme for game populations called “WILD” is based
 8 on information retrieved from individual hunting districts, with coverage of about 40% of
 9 all hunting districts. The reliability of the population data obtained through this
 10 programme has been confirmed by comparison with partridge mapping data using
 11 playback calls. (Tillmann et al. 2012). Fig. 6 shows the trends in populations size per
 12 federal state measured in spring pairs that have been calculated based on densities
 13 reported from the hunting districts surveyed (WILD 2018). The strongest declines have
 14 been registered in the federal states holding the largest populations: about 50% in
 15 Niedersachsen (Lower Saxony) and Nordrhein-Westfalen (North Rhine-Westphalia). The
 16 overall decline documented in the hunters’ survey mirrors the data of the common bird
 17 monitoring programme, which found a decline of 52% during the corresponding period
 18 2006-2015 (with its dataset ending two years earlier than the hunters’ survey).



1

2 Fig. 6. Development of Grey Partridge numbers (spring pairs) 2006-2017 in the federal states of
 3 Germany according to a survey of hunting districts implemented by the hunters' association.
 4 Source: WILD (2018)

5 For the federal state of Niedersachsen (Lower Saxony) the monitoring of game species
 6 by the hunters' association had started earlier, with data available since 1993 (Strauß
 7 2018). The coverage of hunting district by the survey is very high, about 80-90%, and the
 8 data have been corrected for missing data from hunting districts that did not report. For
 9 this federal state the decline observed between 1993 and 2017 is about 83% (Fig. 7). This
 10 again corresponds well with the national common bird monitoring data that found a
 11 decline of 87% during the corresponding period 1993-2015 (with its dataset ending two
 12 years earlier than the hunters' survey).

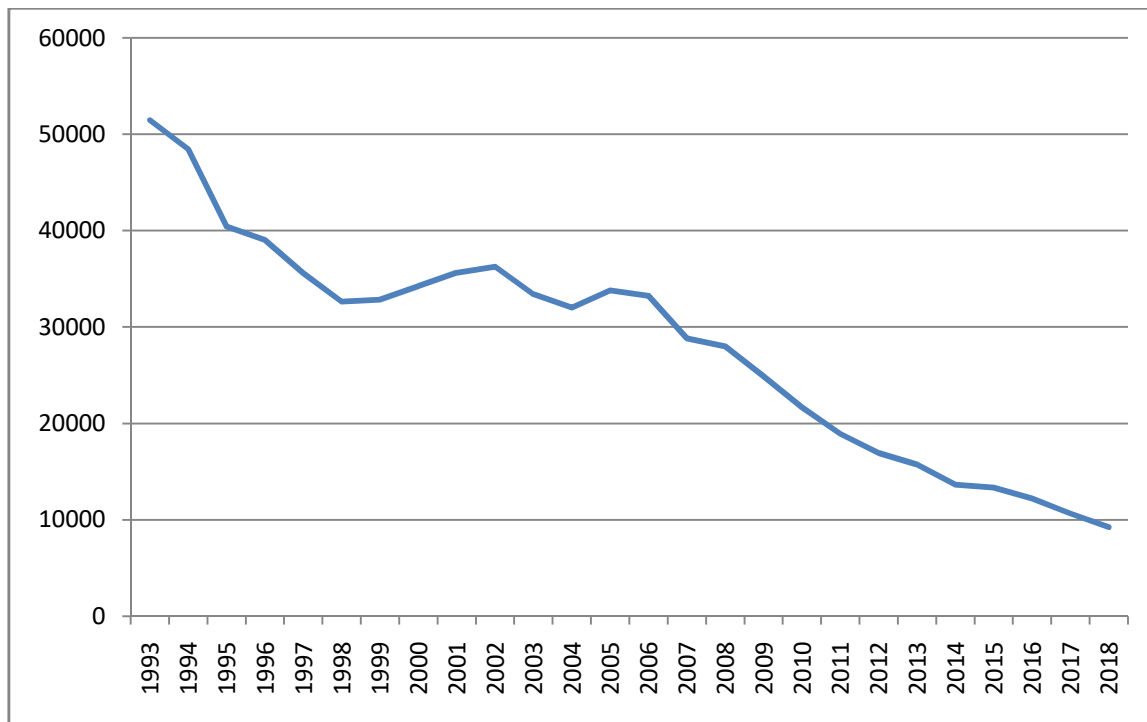
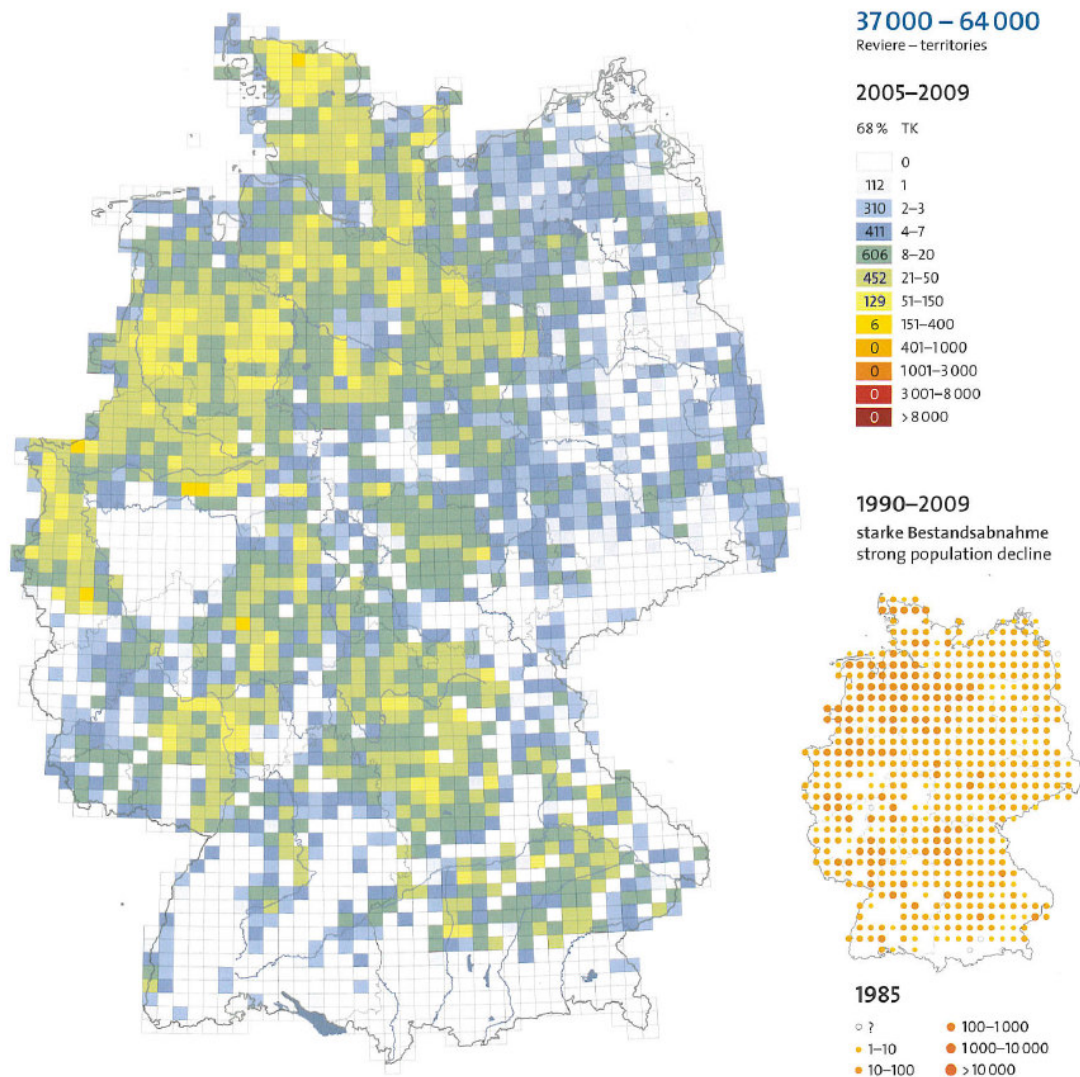


Fig. 7: Number of spring pairs in Niedersachsen (Lower Saxony) according to the “WILD” survey of the hunters’ organisation. Source: Strauß 2018.

National distribution and distribution trend

The distribution trend according to the national reporting of 2019 is a decrease of 31 to 100% for the short-term distribution trend (2004-2016) and a decrease of 26 to 65% for the long-term distribution trend (1980-2016) (Gerlach et al. 2019).

The national breeding bird atlas for 2005-2009 (Gedeon et al. 2014) provides raster maps of the distribution of the species in Germany including a comparison to the distribution shown in the previous breeding bird atlas for the year 1985 (Fig. 8). The current distribution still appears continuous for many regions, but leaving large unpopulated areas especially at higher elevations and in Eastern Germany. These gaps, mainly in eastern, southern and western Germany amount to over 900 grid cells or 30% of the total area of Germany. These respective gaps were much smaller in the 1985 distribution map of the Grey Partridge, leaving just higher elevations unpopulated (Rheinwald 1993).



1

2 Fig. 8: Distribution and abundance of Grey Partridges in Germany 2005 - 2009. The small map shows the
3 distribution of the previous German Breeding Bird Atlas of 1985 (Rheinwald 1993). Source:
4 Gedeon et al. (2014).

5

6 However, what looks like a contiguous distribution on a raster map with a grid size of
7 126 km² is not necessarily contiguous for a species with an average life time mobility of
8 a few kilometres (median for females 1.2 km; Gottschalk & Beeke 2014). The raster map
9 of the German Breeding Bird Atlas (Gedeon et al. 2014, Fig. 8) displays many regions
10 with very low densities: densities of 1-50 pairs per grid (<0.4 pairs/km²) cannot be
11 considered as contiguous populations due to the low mobility of the species. Buner &
12 Aebisher (2008) even regard densities below 2 pairs/km² as critical for long-term
13 survival. The average density of the Grey Partridge on farmland of Germany is about 0.2
14 pairs/km (Arnold et al. 2016). That means, the remaining range is highly fragmented with
15 very few regions reaching densities >0.4 pairs/km² which could be considered as
16 contiguous populations: Only 135 grids (=4.5% of the area of Germany) show densities

1 >0.4 pairs/km² and can therefore be considered as areas with contiguous populations
 2 (Gedeon et al. 2014).

3 The real contraction of the national distribution appears much more severe when assessed
 4 on a finer geographical resolution. Such data are available since 2006 from the “WILD”
 5 survey of the German Hunters Association (Deutscher Jagdverband (DJV)) established
 6 based on individual hunting districts, with a coverage of about 40% of all hunting
 7 districts. Tab. 2 shows the percentage of hunting districts for each of the German Länder
 8 (regions, federal states) that holds Grey Partridges and the number of hunting districts for
 9 which data were received (sample size) for the first and last year with available data.

10 Tab. 2: Distribution of Grey Partridges based on hunting districts. The data show a strong decline of
 11 distribution on a fine geographical resolution within just 11 years. Percentages based on very
 12 small sample sizes in set in brackets. Source: WILD, Wildtier-Informationssystem der Länder
 13 Deutschlands, DJV

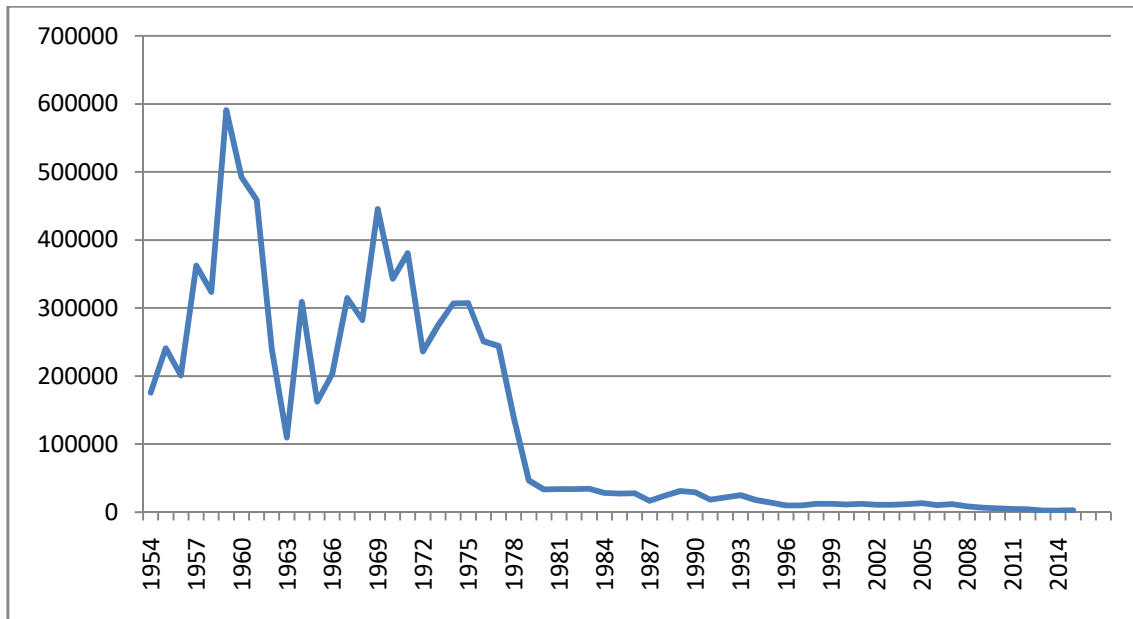
federal state	2006		2017		2006-17
	% hunting districts with partridges	number of hunting districts considered	% hunting districts with partridges	number of hunting districts considered	Distribution change
Baden-Württemberg	16,0	3928	10,8	3993	-32.5%
Berlin	(0,0)	4	0,0	2	0.0%
Brandenburg	22,4	2739	14,9	3040	-33.5%
Bremen	19,4	36	17,8	45	-8.2%
Hamburg	(100,0)	1	20,4	54	-79.6%
Hessen	40,3	1274	35,4	226	-12.2%
Mecklenburg-Vorpommern.	28,2	1656	16,9	1306	-40.1%
Niedersachsen	60,8	8049	34,5	7603	-43.3%
Nordrhein-Westfalen	54 (in 2009)	no inf.	27,4	1683	-49.3%
Rheinland-Pfalz	41,5	1264	55,1	89	32.8%
Saarland	48,8	172	16,4	134	-66.4%
Sachsen	14,8	1207	no inf.	0	no inf.
Sachsen-Anhalt	39,2	1719	31,4	1446	-19.9%
Thüringen	25,2	2508	21,3	2694	-15.5%
Total	38,6	26257	24,1	22315	-37,4%

14 The WILD survey based on over 20,000 individual hunting districts for which data were
 15 received shows a decline in the national distribution of 37,4% within 11 years between
 16 2006 and 2017. Thereby, the trends were negative in every single region with trends in
 17 the so-called “Flächenbundesländer”, i.e. the 13 federal regions excluding the three city-
 18 based regions, ranging from minus 12% in Hessen to minus 49% in Nordrhein-
 19 Westfalen. There are only two exceptions: Rheinland-Pfalz reported an increase of 33%,
 20 but this is likely caused by the drastic drop of responding hunting districts from 1264 in
 21 2006 to only 89 in 2017. The other exception is Berlin, which reported a stable trend,
 22 because it does not hold any partridges any more.

1

2 *Population trend before 1990 and 1980*

3 Before the onset of systematic national bird monitoring schemes in 1990, the most
4 systematic empirical data on game bird populations can be retrieved from hunting bag
5 statistics. For Germany, systematic records of hunting bags reach back to 1954 (Fig. 9)
6 and demonstrate that the strongest decline of the species has actually happened even
7 before 1980. Although hunting bags have the major drawback that they are density
8 dependent, hence exaggerating fluctuations in population size, they do give an indication
9 of changes in population size in the long term. Between 100,000 and 600,000 Grey
10 Partridges were shot annually during the 1950s, 60s and 70s in Germany, thereby
11 manifesting the hunting of Grey Partridges as a socially and economically relevant factor
12 in the past. There have been a few strong declines during the period covered by the
13 hunting bag records. These have presumably been caused by adverse weather conditions,
14 like snow-rich winters or rainy summers. Usually, partridge populations can easily
15 recover from such breakdowns. Doubling population size within one year is a typical
16 ecological trait of partridge populations, when driven below habitat capacity by weather
17 conditions. One such crash occurred in 1962/63: a strong winter with unusual high and
18 long-lasting snow cover had caused high mortality. It took only one year that the
19 population was back at average densities. In January and February 1979 again, a very
20 high and long-lasting snow cover caused a crash in population sizes. This time, however,
21 the Grey Partridge never recovered from that. The reasons for a reduced capacity to
22 compensate population crashes by quick reproductive growth are described below. After
23 1979 the decline documented by the hunting bag statistics continued (see detailed
24 presentation in Fig. 10). A short interruption of the continuous decline was during a
25 stable period at already very low densities from 1996 – 2006. Then, the decrease resumed
26 (Fig. 10 for Germany and Fig. 11 presented separately for federal states). Tab. 3 shows
27 the latest available bag figures from the year 2015. The species is now only hunted in six
28 of 16 federal states, with a voluntary hunting moratorium implemented in most federal
29 states and by most hunters. In 2015 a total of 2726 partridges are listed in the hunting bag
30 statistic (Tab. 3), which includes both birds shot as well as birds found dead. For the
31 three year period of 2013-2015 an average of 2500 birds were included in the annual bag
32 numbers. Thus, the latest hunting bag figures of 2015 are little more than 1% of annual
33 hunting bags recorded in 1954 and about 8% of the bags recorded in 1980. Hence, the
34 national long-term trend since 1980 reported in 2019 in the national reporting under the
35 Birds Directive (minus 91%) appears perfectly in line with the decline documented by
36 the national hunting bag statistics. At the same time, according to the hunting bag
37 statistics, the national population of 1980 was already only about 10% of the population
38 of the 1950ies. So, the current population is only about 1% of the population of the
39 1950ies.



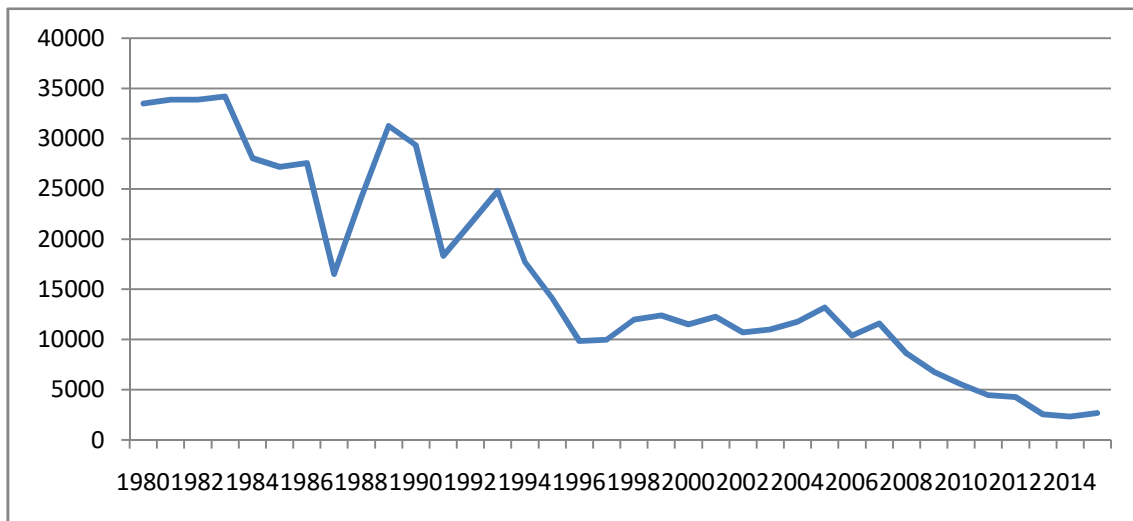
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Fig. 9: Hunting bags of Grey Partridges since 1954 recorded for Germany (incomplete for the former GDR until 1990). From an average of 300.000 in 1954-1978 the hunting bag decreased to 2.500 in 2013-2015 (decrease by 99,2%). Source: DJV-Handbücher 1980-2018.

3

4



5

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Fig. 10: Hunting bags of partridges since 1980 recorded for Germany (incomplete for former GDR), a zoom into the figures presented in Fig.9 for a wider period. Since 1980 the bags decreased by 92%.. Source: Deutscher Jagdverband (1980-2018)

7

8

9

Fig. 11 shows the development of hunting bags separate for the different federal states. The development of the bag numbers mirrors the data obtained by the “WILD” survey amongst hunting districts, with the strongest declines registered in the federal states with the largest populations of the species, like Niedersachsen, Nordrhein-Westfalen and Bayern.

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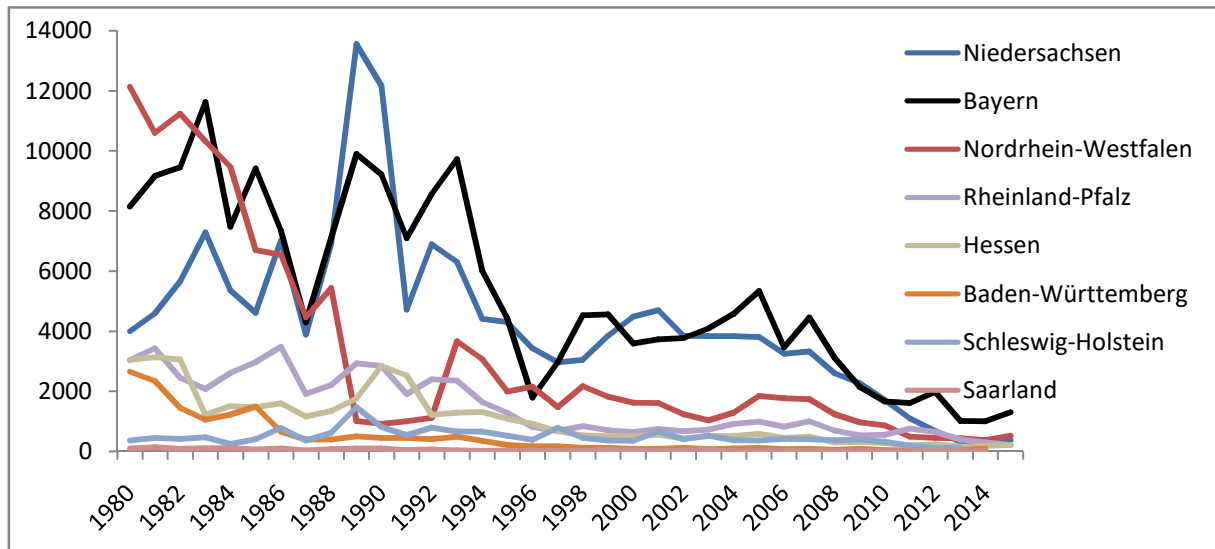


Fig. 11: Regionalised development of hunting bags for the federal states of Germany. States with incomplete or very low numbers are excluded. Source: Deutscher Jagdverband (1980-2018).

Tab. 3: Latest available hunting bag figures per federal state for the year 2015 (2014 for Schleswig-Holstein). The numbers include both birds shot as well as birds found dead. There is no more hunting of the species in other federal states. Source: Deutscher Jagdverband (1980-2018)

Federal state	Grey Partridge Hunting bag 2015 (2014 for Schleswig-Holstein)
Niedersachsen	375
Bayern	1303
Nordrhein-Westfalen	523
Rheinland-Pfalz	215
Hessen	213
Schleswig-Holstein	97
TOTAL	2726

Reconstruction of the 1980 population size

The population size at the time when the Birds Directive came into force is an important reference figure, when establishing the favourable reference population following the methodology of Bijlsma et al. (2019). The easiest way to arrive at the population size of 1980 is by reverse-calculating the population size using the current population size and the trend since 1980 reported in the German national Birds Directive report of 2019. According to this, the national population of Grey Partridges in 1980 was between 233,000 and 411,000 pairs, with a geometrical mean number of 310,000 pairs.

One would arrive at similar figures basing this backward calculation exclusively on the decline of the bag statistics, which in 2015 were only 8% of the bag number of 1980.

1 This would result in 262,500 to 462,500 pairs with a geometrical mean of about 348,000
2 pairs.

3 If one would want to avoid possible distortions of the data by the gradual introduction of
4 a voluntary hunting moratorium in recent years, it would make sense to base a backwards
5 calculation until 1990 on the data of the national common breeding bird monitoring and
6 use the national bag statistics only for the backward calculation for the remaining decade
7 of 1989 till 1990. With this calculation one would arrive at an overall decline of 87% and
8 accordingly at a 1980 population of 152,000 to 267,000 with a geometrical mean of
9 201,000 pairs.

10 We assume the numbers reported in the national Birds Directive report of 2019 as the
11 most accurate ones, because they will have included the Common Bird Monitoring trend
12 up to 2016, rather than the figures up to 2015 available to us. These figures also have
13 been consulted with and approved by all the responsible regional authorities for bird
14 conservation. Therefore, for any further considerations we will assume a number of about
15 310.000 breeding pairs to be the national population of 1980.

16 This figure has been calculated on good data on the current population and using trend
17 data of systematic monitoring programmes. It needs to be stressed that it is not possible
18 to derive at correct historical population estimates from numbers published at the time,
19 because estimates of absolute numbers underlie substantial errors not found in systematic
20 monitoring. One reason is that ornithological mapping substantially underestimates
21 partridge numbers due to very poor vocalizations of partridges during typical mapping
22 times in the early morning. One typical example: The Red List of Lower Saxony 2002
23 (Südbeck et al. 2002) did not consider data from the “WILD” survey of the hunters’
24 association and estimated the regional population size based purely on ornithologists’
25 data at 10.000 pairs - only one third of the population size established by WILD at that
26 time (see Fig. 7). Another example is the population estimate given for 1985 in the first
27 national breeding bird atlas (Reinwald 1993): It states 80,000 breeding pairs, while the
28 real value calculated based on monitoring trend data should have been about three times
29 as much.

30 9.4. Threat status assessments

31 The Grey Partridge is assessed as “Least Concern” in the Global Red List of Birds
32 (BirdLife International 2020) and in the European and the EU Red List of Birds
33 (BirdLife International 2015) due to its overall very large population and the resulting
34 low risk of total extinction.

1 It is however classified as SPEC 2 in the assessment of European birds of conservation
 2 concern (BirdLife International 2017) due to its unfavourable conservation status and the
 3 concentration of its world population in Europe.

4 In Germany it is classified in category 2 “threatened” (“stark gefährdet” in German) in
 5 the national red list of breeding birds. For western Germany the species was not included
 6 in the first versions of the national red list published since 1971 (DS/IRV 1971, 1972,
 7 1974, 1976), but was included into the category “threatened” (“stark gefährdet” – then
 8 called category 3) in the updated red list of 1982 (DS/IRV 1982), thereby jumping the
 9 “near-threatened” and “vulnerable” categories. In the first edition of the national red list
 10 for the re-unified Germany (DS/IRV 1991), the species was listed only as “vulnerable”
 11 (“gefährdet”, category 3), but in all following editions it was again classified as
 12 “threatened” (“stark gefährdet”, category 2) (Witt et al. 1996, Bauer et al. 2002, Südbeck
 13 et al. 2007, Grüneberg et al. 2015; Sudfeldt et al. 2020). Especially the classification of
 14 1982 is proof that the species has already at that time been known to have declined
 15 sufficiently to be included in the national red list. Its population therefore has to be
 16 considered “depleted” already at the time the Birds Directive came into force in 1980,
 17 which has also already been shown above comparing hunting bag statistics over time.

18 All federal states of Germany issue their own regional red lists of breeding birds (Tab. 4).
 19 The category 2 “endangered” is applied on most German regions like on national level,
 20 but it is extinct (category 0) in Berlin, critically endangered (category 1) in Baden-
 21 Württemberg, Hamburg and Sachsen, whereas in Schleswig-Holstein it is only listed as
 22 near-threatened (“Vorwarnliste”).

23 Tab. 4: Status of the Grey Partridge on the latest versions of the national German red list and each of the 16
 24 regional red lists, categories are: 0: extinct, 1: critically endangered, 2: endangered, 3: Vulnerable,
 25 V: near threatened

Germany	Brandenbg.	Berlin	Bad.Württ.	Bayern	Hamburg	Hessen	Meck.-Vorp.	Nieders.	Norh.-Westf.	Rheinl.-Pfalz	Saarland	Sachsen	Sachs.-Anh.	Schlesw.-Holst.	Thüringen
2	2	0	1	2	1	2	2	2	2	2	2	1	2	V	2

1 9.5. Favourable reference values (FRVs)

2 Article 2 of the Birds Directive requires member states to maintain or adapt the
3 populations of European wild birds to “a level which corresponds in particular to
4 ecological, scientific and cultural requirements”, the so-called adequate state of
5 conservation. Thereby, such “adequate state of conservation” must be understood in the
6 same way as the term “Favourable Conservation Status” that has been used for the same
7 purpose in the EU Habitats Directive (COUNCIL DIRECTIVE 92/43/EEC). This view
8 has also be taken by the European Commission, e.g. in the EC hunting guidance, footnote
9 to paragraph 2.4.14: "Whereas the term ‘favourable conservation status’ is not mentioned
10 explicitly in the Directive (was introduced in 1992 in the Habitats Directive) it is implicit
11 from the requirements of Article 2 of the Directive.” (European Commission 2008).

12 On this basis, the European Commission has contracted a study about how to establish
13 reference values for the favourable conservation status of birds and other species. The
14 contractors, Bijlsma et al. (2019), have developed a justification and a methodology for
15 the establishment of these reference values, which we are following here.

16 The Favourable Reference Value for the Grey Partridge population in Germany (FRP)
17 can be established as follows:

- 18 1. If the species was considered in good state of conservation when the Birds
19 Directive came into force, the FRP should be the population size of 1980
20 (directive value, DV).
- 21 2. If the species was already depleted in 1980, then the FRP should be set at a value
22 corresponding to the potential population based on average densities in predicted
23 available habitat according to an ambitious but realistic landscape scenario for the
24 year 2050. This value cannot be smaller than DV.
- 25 3. In either case, the FRP cannot be smaller than the Minimum Viable Population
26 (MVP) multiplied with a “security factor” of 10. If the population in the
27 respective area is contiguous with populations outside the respective area (ie. with
28 sufficient exchange), then the MVP-multiplier value is to be attributed to the
29 contiguous population and only the fraction of it corresponding to the population
30 in the respective area is to be applied.

31 Climate change does not have to be considered as having an influence on FRVs for the
32 Grey Partridge as the species is predicted to react neutral to the expected climatic
33 changes in Germany (Devictor 2008). If anything, less snow cover in winter and less rain
34 in summer could be assumed to help the population.

35 As the partridge population in 1980 was already severely depleted as shown by the
36 hunting bag statistics and the inclusion of the species in the red list of 1982, criterion 1

1 cannot be applied. Therefore the directive value is not to be considered as DV other than
2 as a minimum value in case criteria 2 and 3 result in smaller figures.

4 *Minimum Viable Population*

5 Population Viability Analysis for the Grey Partridge was done by De Leo et al. (2004)
6 for different harvesting scenarios and assuming threshold densities for extinction, but not
7 with the focus of defining the size of a minimum viable population. Bro et al. (2000)
8 analysed the trend of French partridge populations by demographic models and found
9 that all vital rates have to be improved in order to stop the decline of partridges, but with
10 a focus on summer survival of females. Gottschalk & Barkow (2005) modelled the
11 Minimum Viable population (MVP) for a local partridge population using different
12 scenarios. The model is mainly based on demographic data from older studies which are
13 too optimistic nowadays. The model is not considering catastrophes (serious winters as in
14 1963 and 1979) either. Such catastrophes are the main drivers of extinction in small
15 populations. The pessimistic scenario of the model describes a MVP of about 1.000 pairs
16 (extinction risk 5% for 50 years). Due to the constraints of that approach, no valid value
17 for a MVP of Grey Partridge is available from models.

18 More general approaches are regarded: Trail et al. (2007) present a meta-analysis of 30
19 years of MVP research, finding in most species a value of several thousand individuals.
20 Frankham et al. (2014) stress effective population size has to be larger than 1.000 to
21 enable populations to keep genetic diversity and potential for evolution. Hilbers et al.
22 (2016) derived relationships between body mass and MVP. Birds below 1 kg are
23 regarded to have MVP-Values at about 2500 individuals. Such values should be
24 combined with a multiplier (Bijlsma et al. 2019), resulting in the value of 12.500
25 breeding pairs.

26 As described above (Chapter: National distribution), most regions of Germany do not
27 hold the densities of breeding pairs to enable the establishment of continuous
28 populations. There are few regions left (4.5% of the grids, Fig. 8) holding partridge
29 populations with densities allowing exchange. The number of partridges within these
30 regions is a few hundreds each, and therefore much smaller than the minimum viable
31 population. Under the current fragmented situation due to the extremely low mobility of
32 the species no minimum viable population exist anymore in Germany.

33 For the purposes of establishing the FRP of the Grey Partridge for Germany, the MVP
34 criterion can therefore be interpreted in two different ways:

- 35 - The MVP-multiplier could be applied to the whole national population under the
36 assumption, that there will be sufficient population exchange within Germany,

1 but no significant exchange with populations outside Germany. The MVP-
2 multiplier figure would be 12,500 pairs.

- 3 - As a contiguous population can only be assumed at densities higher than 0.4
4 pairs/km² the MVP-multiplier figure would have to be applied to each isolated
5 local population. However, the number of isolated populations is unknown. As an
6 alternative it could be postulated that a minimum density of 0.4 pairs/km² has to
7 be achieved to ensure that the MVP-multiplier has to be applied only once. With
8 a terrestrial surface of Germany of 357,386 km², 52% of which are farmland, this
9 would amount to 74,000 breeding pairs.

10

11 *Potential population in predicted available habitat*

12 The whole farmland of Germany with altitudes <500 m above sea level used to be
13 suitable partridge habitat. Farmland currently makes up 52% of the terrestrial surface of
14 Germany, i.e. about 186,000 km². If one deducts an estimated 10% for farmland above
15 500 m altitude, there is 167,000 km² of potential habitat. The general shares of the major
16 habitat types in Germany have not changed much over the past decades and are not
17 expected to change significantly until 2050.

18 Deducting from the hunting bag statistics, an estimated 3.000.000 pairs of Grey
19 Partridges populated this area around 1954 resulting in an average density of about
20 18 pairs/km². At that time, however, crops were much less intensively used and
21 partridges were able to use all the farmland as potential habitat including productive
22 crops. It is not realistic to assume that partridges will be able to use conventionally
23 farmed productive crops as suitable habitat by 2050. Their occurrence will therefore be
24 restricted to non-productive habitat elements like set-asides and margins. Such non-
25 productive farmland habitats should amount to 10% of each farm. Additionally, the
26 National Biodiversity Strategy of Germany sets a target of 20% organically managed
27 farmland (BMU 2007). Organically managed farmland is not by itself without additional
28 conservation measures automatically suitable for Grey Partridges. Once example are
29 clover-grass crops common in organic agriculture that can act as ecological traps for
30 breeding partridges as they are often mown during breeding. Here we assume, that 20%
31 of organic farmland will provide suitable conditions for Grey Partridges. Together this
32 would be 14% of all potentially suitable farmland habitat or 23,000 km².

33 Applying the historic overall density of Grey Partridges across all farmland in 1954 (18
34 pairs/km²) to just 28% of all potentially suitable farmland habitat would result in 421,000
35 pairs.

1 Another possible calculation is to take the value of 2 pairs/km² considered as the critical
2 minimum for a sustainable population by Buner & Aebisher (2008) (see above), and
3 apply it to all the potentially suitable farmland. This density enables a continuous
4 population of partridges and would solve the problem of fragmentation of the present
5 stock and enables the spatial functioning of the population, considering the low mobility
6 of the species. This would result in 335,000 pairs.

7 The FRP according to criterion 2 could therefore be set between 335,000 and 421,000
8 pairs.

9

10 *Setting the Favourable Reference Value for the population (FRP)*

11 The FRP calculated under criterion 2 is between 335,000 and 421,000 pairs. This is
12 higher than the 74,000 pairs calculated under the MVP criterion. It is also not lower than
13 the directive value of 233,000 to 411,000 pairs (but coincidentally very similar),.

14 It can therefore be concluded that the FRP for the Grey Partridge in Germany has to be
15 set equal to the FRP calculated under criterion 2, i.e. 335,000 to 421,000 pairs.

16 Hence, the current national population amounts to only between 5% and 11% of the
17 Favourable Reference Value for Population.

18

19 *Setting the Favourable Reference Value for range and habitat (FRR and FRH)*

20 The Grey Partridge is a potential resident of all farmland across Germany at altitudes
21 below 500 m above sea level. The Favourable Reference Value for range (FRR) should
22 therefore cover all farmland at this altitude, i.e. about 167,000 km². This would ensure
23 that the Grey Partridge will still occur in all of Germany's federal states (with the
24 possible exception of some city states like Berlin).

25 It has been discussed that in the future it is unlikely that conventionally farmed
26 productive cropland can be suitable habitat for Grey Partridges, although all farmland has
27 the potential to be restored. But 14% of all potential farmland should be managed in a
28 way that makes it suitable partridge habitat. The Favourable Reference Value for habitat
29 (FRH) should therefore be set at 23,000 km².

1 9.6. Reasons for the decline

2 The reasons for the Europe-wide decline in Grey Partridges are well studied. Two main
3 reasons are responsible for the decline: use of pesticides and changes in landscape
4 structure, both of which are promoting predation as a third reason of decline (Potts 1986,
5 Potts 2012, Kuijper 2009). The effects of the three causes are connected.

6 7 *Pesticides, indirect effects*

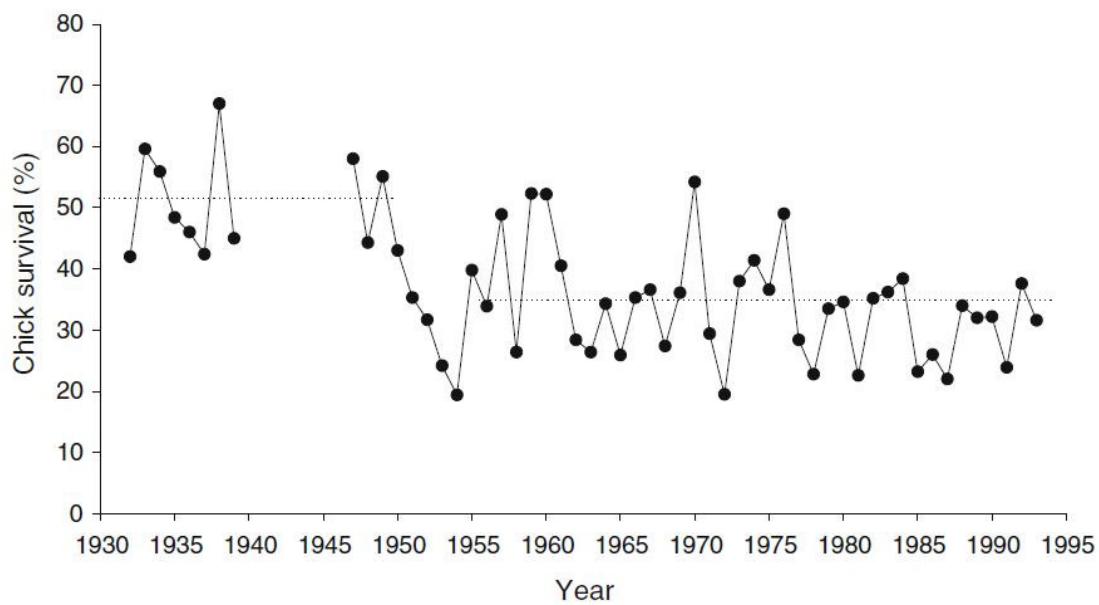
8 Two important food resources for partridges are heavily reduced by the use of pesticides:
9 seeds of weeds and insects.

10 Seeds of weeds make up 30-60% of the diet of Grey Partridges from spring to autumn
11 (Oko 1963, Orłowski et al. 2011). Meyer et al. (2014) detected population declines for
12 many common arable weeds of 95-99% since 1950 and a species loss of 71% in the
13 interior of fields. In 1970, about 40% of the winter cereal fields in northern and central
14 Germany were not treated with herbicides, 1985 almost none remained untreated
15 (Leuschner et al. 2014). Exactly during this time, when the application of pesticides
16 became a standard procedure for almost all arable land, the strongest decline of partridge
17 numbers occurred, as shown by the German hunting bags statistics in Germany which
18 dropped by about 90% during these decades.

19 During egg-laying, the partridge female needs protein-rich food. The large clutch has the
20 weight of about 60% of the body mass of the female and laying takes the female nearly
21 one month. During laying, invertebrates are the main source for protein, up to 63% of the
22 diet (Dwenger 1991). Chicks feed nearly exclusively on arthropods during the first weeks
23 of their lives and insects remain important until late summer. Biomass and abundance of
24 insects is declining in many habitats in Europe (Hallmann et al. 2017, Shortall et al.
25 2009, Nilsson et al. 2008, Potts et al. 2010). Especially in partridge habitats, insect
26 biomass in fields treated with pesticides was only a quarter of the amount in unsprayed
27 fields (Wiedenmann 2019, Lemansky 2008) and food uptake of partridge chicks is
28 reduced (Bade 2008, Tillmann & Ronnenberg 2015). Potts (1986, 2012) explained the
29 decrease of insects in his long-term studies in arable partridge habitats by the use of
30 herbicides and insecticides. Mainly the reduction of weeds by herbicides contributes to
31 the reduction in species richness and biomass in insects (Potts 1986). Rands (1985)
32 describes a field experiment designed to test the effect of pesticide use on partridges
33 chick production by manipulating spraying regimes on cereal fields (just herbicides and
34 fungicides; no insecticides). Brood production was at average 2.15 chicks at fully
35 sprayed fields and 6.38 at fields not sprayed at 6 m wide strips at the edges (significant at
36 a level of $p < 0,001$).

1 Reduction in insect biomass resulted in a reduction in chick survival (Fig. 12). In the UK,
2 the strongest decline happened synchronously with the reduction in chick survival. In the
3 UK, the high coverage of herbicide-treated field occurred earlier than in Germany: In
4 1960 already 80% of cereal crops were sprayed (Potts 1986). Fig. 13 demonstrates the
5 effect of insect availability on chick survival. Panek (2019) describes a decline in chick
6 survival in Poland from 57% (in 1987) to 34% nowadays.

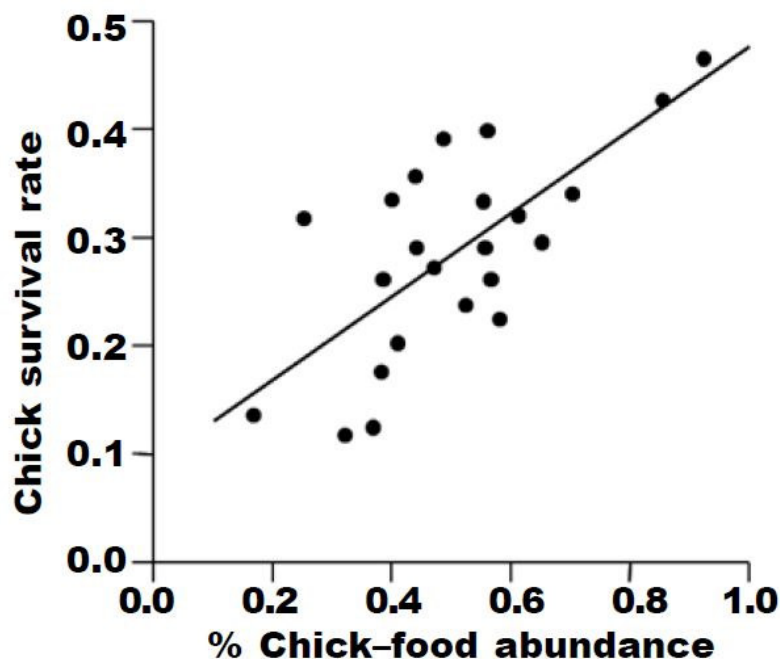
7 Hallmann et al (2014) describe a recent trend in insectivorous birds correlated with the
8 amount of application of Imidacloprid, a neonicotinoid insecticide. The effect on birds is
9 discussed to be not a direct effect by poisoning birds, but indirect by depleting insect
10 food resources.



11

12 Fig. 12 Annual survival rates of Grey Partridge chicks from 80 clutches from hatching to an age of six
13 weeks. Survival has been determined on the basis of family size in August according to Potts
14 (1986). Data from 1930 to 1932 originate from 'Great Witchingham', UK and data from 1933 to
15 1993 refer to data collected throughout the UK by the National Game Census. Data from Potts and
16 Aebischer (1995). Source: Kuijper et al. (2009).

17



1

2 Fig. 13: Annual Grey Partridge chick survival is closely related to the average density of chick-food
 3 insects sampled in cereal crops (five farms in Sussex at the farm scale 1970–1992). Source:
 4 Aebisher & Ewald (2012).

5

6 Indirect effects of pesticides on vertebrates are difficult to detect and several criteria have
 7 to be fulfilled to proof it. The only documented case where indirect effects were
 8 definitively shown using the full range of these criteria in a fully replicated field
 9 experiment was for the Grey Partridge in Britain (Rands 1985) following several decades
 10 of intensive study. Population modelling showed that declines in Grey Partridge
 11 populations could be wholly explained by herbicide-induced reductions in prey
 12 availability causing reduced growth and survival of Grey Partridge chicks (reviewed by
 13 Potts 1986; Gibbons 2015).

14 The continuous reduction in habitat quality in crop fields reduced the habitat capacity for
 15 partridge populations on farmland. In order to fulfil their needs - especially during
 16 breeding - Partridges became more and more depended on small remnants of farmland,
 17 which remained untreated by pesticides. A radio-tracking study of >200 partridges of
 18 Gottschalk & Beeke (2014) demonstrated that partridges rely on semi-natural vegetation
 19 types all year round (they spend about 50% of the day time in semi-natural vegetation,
 20 and even 70% during breeding). This is confirmed by other studies (Buner et al. 2005,
 21 Potts 2012). The reason for the high preference of non-crop vegetation during breeding
 22 time is insect abundance and vegetation structure.

23

24

1 *Pesticides, direct effects*

2 Few cases of direct poisoning of Grey Partridges are known, with a peak in 1961 as a
3 consequence of Dieldrin application in Britain (Potts 2012). During radio-tracking of
4 large numbers of partridges, no case of direct poisoning occurred (200 birds: Gottschalk
5 & Beeke 2014, 100 birds: Olesen 2018).

6 Lopez-Anita et al. (2015) detected lethal effects of the neonicotinoid Imidacloprid at the
7 recommended dose of application in feeding trials of Red-legged Partridges (*Alectoris*
8 *rufa*) and sub-lethal effects on the immune system, reduced plasma biochemistry
9 parameters and reduced fertility at 20% of the recommended dose. The birds were fed
10 exclusively with Imidacloprid-coated seeds. During food choice experiments partridges
11 avoid the pesticide-coated seeds after having experienced post-ingestion distress, but
12 unpredictability of food sources increases the consumption of coated seeds (Lopez-Anita
13 et al. 2014). The toxicity of Imidacloprid to Grey Partridges is higher than to all other
14 bird species tested (Gibbons et al. 2015). Ingesting only six Imidacloprid coated beet
15 seeds makes up the lethal dosis (LD50) of a Grey Partridge (Gibbons et al. 2015).

16 The negative indirect effects of pesticides caused by the desired effects of pesticides
17 (reduction in weeds and insects) are regarded to exceed the direct toxic effects on birds
18 by far (Potts 2012, Hallmann 2014).

19

20 *Changes in landscape structure*

21 The main needs of partridges provided by their habitats are cover and food. Different
22 crops provide these conditions at different seasons (Gottschalk & Beeke 2014), so
23 partridges switch between different crop types within their home range. Smaller fields
24 facilitate these necessary switches. The home range size of partridges and therefore
25 partridge density depend on the availability of uncropped vegetation (e.g. Johanning
26 2011, Hirt 2012)

27 The use of pesticides on crops made partridges more dependent on permanent, uncropped
28 and unsprayed vegetation: mostly margins, grassy paths, and fallow land. The availability
29 of these non-productive areas, however, has severely declined: Average field sizes in
30 Central and Northern Germany quintupled from 1960 to 2010 (Leuschner 2014) with a
31 resulting loss in margins, paths and local heterogeneity in crops. That resulted in a
32 decrease in habitat capacity, which is determined by the availability of permanent,
33 unsprayed vegetation (Potts 1986, 2012). This also appears to be the explanation for
34 lower Grey Partridge densities in Eastern Germany compared to Western Germany: For
35 historical reasons, the average field size in Eastern Germany is much larger than in the
36 West.

1

2 *Predation*

3 Partridges experience naturally a high mortality and have adapted to compensate for that
4 by producing one of the largest clutches among birds worldwide. Predators cause the
5 largest proportion of mortality of adult partridges (Gottschalk & Beeke 2014, Olesen
6 2017, Potts 2012). Predation can limit bird populations (review by Roos 2018):
7 Especially ground nesting birds and single-brooded species – as the partridge - are
8 sensitive to predation effects. For the partridge, the effect of predation on local
9 population size is even tested in a large field experiment (Tapper et al. 1996). De Leo et
10 al. (2004) and Potts (2012) identified a density-dependent effect of predation on the Grey
11 Partridge.

12 Increased predation rates can contribute to the decline of target species. Especially
13 females of partridges are predated, mainly by mammals (Olesen 2018, Gottschalk &
14 Beeke 2014; in both radio-tracking studies 80% of the losses). Incubation is the most
15 dangerous time in a life of a partridge female; mortality due to predation during breeding
16 is much higher than during normal winters. The Red Fox (*Vulpes vulpes*) is identified as
17 the main predator of partridges. Foxes have increased in Germany. Hunting bags tripled
18 since 1980 from 250.000 to 700.000 with a peak in 1995/96 (WILD 2018). However,
19 most of the increase happened in the late 1980s and early 1990s, ie. only after the largest
20 decline in partridges. Vaccination against rabies all over the country contributed mostly
21 to the observed increase in foxes. In the 1970s and 1980s fox densities were rather
22 constant. Since 1996 hunting bags of foxes decreased again. However, the decrease in
23 bags after 1996 does not represent a decrease in fox numbers but a loss of interest in
24 hunting small game. Knauer et al. (2010) analysed several long-term time series of
25 partridge decrease and the link to fox populations. They found, that the general negative
26 trend in partridges due to changes in farming practice is much stronger than the effect of
27 fox increase.

28 Predation risk in partridges is closely connected to changes in habitat choice in
29 partridges: Harmange et al. 2019 analyzed a long-term data set of partridge sightings.
30 They found a switch to riskier habitat elements, driven by the loss of habitat quality on
31 farmland. Panek (2013) stresses the landscape effect on predation risk by foxes: In
32 simplified landscapes, where the few remaining suitable habitat for partridges are often
33 small and of linear shape, predators removed a higher percentage of the partridge
34 population. Predator and prey meet with a higher probability in landscapes with a low
35 abundance and predominantly linear shape of permanent structures.

36 Hence, while predation is certainly contributing to the observed declines of Grey
37 Partridges, the negative effect of predation is exacerbated by the negative changes in

1 landscape structure and the inability of the species to compensate for high predation
2 through increased breeding productivity due to the lack of sufficient food resources.

3

4 *Non-significant possible reasons for decline*

5 Parasites and pathogens: There is no hint for increased mortality by infections or
6 parasites. In a long-term partridge study area in Sussex/UK, even one pathogen
7 (histomonosis) disappeared during the decades of investigations, probably due to lower
8 densities of partridges (Potts 2012).

9 Hunting: Usually hunters react to reduced densities of partridges with lowering the
10 shooting rate and most hunting is done sustainably. A few cases are known, that
11 excessive hunting brought partridges to local extinction (Aebischer & Ewald 2004,
12 Watson et al. 2007, De Leo et al. 2004). Massive releasing and hunting of pheasants and
13 Red Legged Partridges can harm the population of the Grey Partridge (Aebischer & Ewald
14 2004). Releasing of competitor game species at this scale is not a common practice in
15 Germany.

16 A comparison of hunting bag statistics and population figures for Germany for the period
17 1990 to 2015 suggests that the number of individuals taken per year is roughly
18 proportional to the number of breeding pairs, with the number of individuals in the
19 hunting bag corresponding to slightly less than 10% of the respective number of spring
20 pairs. This means less than about one bird in every 10th family of partridges is taken
21 during the autumn hunting season. Assuming an average family size of 4 to 5 birds in
22 autumn (based on productivity figures given by Aebischer et al. (2004) - see above
23 chapter “biology of the species” – a theoretical value based on overall productivity
24 including unsuccessful pairs), this would suggest about 2% to 2.5% of the autumn
25 population taken by hunting. Potts (1986) has calculated the maximum sustainable yield
26 (MSY) for the hunting of Grey Partridges to be 30% of the autumn population at high
27 chick mortality and even 45% of the autumn population at low chick mortality, i.e. at a
28 value far higher than the average annual take in Germany. The annual hunting take in
29 Germany also is a very small additional mortality compared to an overall annual adult
30 mortality of 58% as determined by Aebischer et al. (2004).

31 Hunting can therefore not be blamed for the general decrease of the partridge in
32 Germany. In the contrary, the interest in small game is a motivation for hunters to
33 increase habitat quality locally and control predators. The presence of many local
34 supporters is beneficial for the partridge. At the same time, partridge hunting can be
35 considered as one of the social and economic aspects to be taken into account when
36 establishing the adequate state of conservation as required by Birds Directive article 2.

1 With the Grey Partridge in its current dire state of conservation, sustainable partridge
2 hunting is all but impossible and reflected in the voluntary hunting moratorium obeyed in
3 most parts of Germany and by most hunters. Returning the Grey Partridge to an adequate
4 state of conservation is of utmost importance also for its role as a major game species in
5 Germany.

6 Fertilizers: Especially field margins lost a part of their biodiversity by the effect of
7 fertilizers on adjacent fields. One important food resource for chicks are hill-building
8 ants which might be reduced by unfavourable vegetation structure caused by the
9 dominance of nitrophilic vegetation. However, the effect of fertilizers on partridge
10 habitat has not been investigated in detail so far.

11 Climate change: Often, bird declines are being linked to changes in climatic conditions in
12 lieu of other convincing explanations. However, the decline of the Grey Partridge in
13 Germany cannot be explained by climate change. First of all, the strongest declines have
14 happened between 1950 and 1980 at a time, when climate change did not yet register in
15 the climatic indicators. Second, Germany is located centrally within the species global
16 distribution with many populations south as well as north of Germany. Therefore, the
17 Standard Temperature Index (STI) of the species according to Devictor et al. (2009),
18 describing the average temperature of its current global distribution is determined to be
19 12.84 °C corresponding well to the range of temperature conditions found in Germany.
20 Therefore, the Grey Partridge population in Germany is expected to react neutrally to the
21 expected change of the climate until 2050, while the situation may be different at the
22 northern and southern edges of the global distribution. If anything, the current signs of
23 climate change with less snow cover in winter and less rain in summer both should rather
24 have a positive effect by reducing winter adult and summer chick mortality.

25 9.7. Measures for partridge protection

26 Measures to improve habitat conditions for partridges have already been tested and
27 proven to be highly effective. As described above, the main problems for partridges
28 occur during the breeding season.

29 In different projects of the Game and Wildlife Conservation Trust in Britain especially
30 two types of habitat improving measures are used: Nesting cover and chick rearing
31 habitat can increase the carrying capacity of the habitat (Ewald et al. 2012, Potts 2012).

32 Nesting cover: Partridges prefer to breed in permanent vegetation providing good cover
33 in spring. The female feeds on insects and therefore unsprayed, permanent vegetation is

1 an essential ingredient of suitable partridge habitat. “Beetle banks” or “wild bird cover”
2 are examples of providing such permanent nesting cover in the UK.

3 Chick rearing cover: Chicks feed on insects, too, and the parents lead them preferably in
4 insect-rich vegetation providing both, cover and open structure to walk in-between.
5 Annual vegetation is preferred during this time. Therefore the British projects provide
6 unsprayed strips of cereals, called “conservation headlands”.

7 Partridge parents with recently hatched chicks are not very mobile. The British
8 “stewardship” system, an agri-environment measure under the EU’s Common
9 Agricultural Policy, guarantees the vicinity of both measures: On the level of a farm a
10 high density of measures is being implemented.

11 Some other additional measures are often combined with the two measures, but they are
12 not as essential: winter cover (often provided as well by the areas provided as nesting
13 cover), winter stubble (providing the seeds of weeds during winter), and hedgerows
14 (mainly needed as winter cover during periods with snow), division of large fields by
15 hedgerows, avoidance of block-cropping (providing heterogeneity on a smaller scale).
16 Bro et al (2012) tested additional grain-feeding and strips of bare ground as measures in
17 an experimental assessment and detected these measures being without effect on
18 partridge populations.

19 In Germany and in many other countries, certain agri-environment schemes have a
20 similar potential to restore farmland habitat for Grey Partridges. The measures are
21 usually spread out over the whole country without the local concentration inherent to the
22 UK’s stewardship system. So, effects are less visible. Especially the flower strips
23 measure provides pesticide-free and insect-rich vegetation and cover. Gottschalk &
24 Beeke (2012, 2014) have developed a treatment of flower blocks, the so-called “bi-
25 annual flower blocks”, which is beneficial for many farmland species (e.g. Wiedenmann
26 2019) and provides both, breeding cover and nesting cover, side by side. Flower strips
27 are cultivated annually just on 50% of each plot. After one year the treatment is changed,
28 and the other half is re-sown. That pattern generated annual vegetation as chick feeding
29 habitat and second year vegetation as breeding habitat directly adjacent on the same plot.
30 This type of flower strip has been implemented as an agri-environment scheme in the
31 German federal state of Niedersachsen (Lower Saxony) and is going to be introduced at
32 other (federal) states due to its proven effectiveness: e.g. Netherlands, Belgium, England,
33 and Baden-Württemberg.

34 Other types of flower strips are offered to farmers in the agri-environmental programmes
35 of other federal states: But they are much less effective for Grey Partridges: Annual
36 flower strips have little effect on partridge conservation, because they do provide cover,
37 insects and seeds too late in spring. Permanent flower strips do not have the annual

1 vegetation for the chicks, but can at least attract a partridge pair to breed there and the
2 adjacent crop vegetation might benefit from the insect abundance inside the strip. Fallow
3 land can be an ecological trap for many late breeding farmland birds, especially for the
4 partridge, when mowing occurs while the birds are still breeding or the chicks are very
5 small. In order to provide good partridge habitat, mowing of fallow land has to be
6 delayed to mid-August at least.

7 In British projects, improvement of farmland habitat quality for Grey Partridges is
8 usually accompanied by predator control, which is proven to be quite effective - in case
9 that the control is implemented at high intensity (in successful projects one professional
10 full time game keeper on 3-10 km²) (Tapper et al. 1996). Predator control is not very
11 effective at lower intensity (Baker & Harris 2005, Lieury et al. 2015), so mostly
12 appropriate for a small scale approach, but not for the wider landscape.

13 Importantly, predation risk of breeding females can be lowered by providing wide
14 structures (at minimum 20 m wide for nesting cover, ideally nearing the shape of a
15 square or circle) instead of linear structures (Gottschalk & Beeke 2014), as this reduces
16 the probability of contact between the bird and the predator during the predator's linear
17 transects walked in search of prey. Therefore, all above-mentioned habitat improvement
18 measures will be more effective if implemented on areas with similar width and length
19 rather than on linear structures, where one of the dimensions is much larger than the
20 other.

21 Measures for partridges are known to also benefit many other threatened farmland
22 species (e.g. Turtle Doves) and provide ecosystem services (e.g. pollinators).

23 9.8. Quantitative comparison of measures required vs. implemented

24 *Amount of measures necessary*

25 In British projects high quality measures have been implemented on about 7-8% of the
26 farmland in order to restore partridge populations with impressive results on the local
27 scale (Aebischer & Ewald 2004, 2010; Potts 2012). Aebischer & Ewald (2004) have
28 calculated the amount of habitat necessary to stop further decrease of Grey Partridges in
29 the UK: Compared to average farmland, additional high quality habitat has to cover 4%
30 of the farmland in order to achieve a chick survival which halts the decline. 6% is needed
31 to increase the population again. Experience of the partridge conservation project in the
32 county (Landkreis) of Göttingen in Lower Saxony/Germany demonstrates similar results
33 (Gottschalk & Beeke 2014): At the scale of the whole county of 1.000 km², only 0,8% of
34 the farmland was converted into flower strips: the partridge population did not increase.

1 Locally, with 7% bi-annual flower blocks, the population increased nearly tenfold about
2 7-8% of Based on these data, Gottschalk & Beeke (2014), calculated, that 1.5 hectares of
3 additional high quality habitat (such as bi-annual flower blocks) are necessary for each
4 additional pair of partridges.

5 To achieve the lowest bracket of the Favourable Reference Population (FRP) of 335,000
6 pairs, it would be necessary to increase the population by 307,000 pairs, to achieve the
7 upper FRP-bracket of 421,000 pairs, 393,000 additional pairs would be needed.
8 Therefore, additional high-quality habitat of between 460,000 ha (4,600 km²) and
9 590,000 ha (5,900 km²) is needed. This would be equal to 2.8% respectively 3.5% of all
10 German farmland below 500 m altitude, or 2.5% respectively 3.2% of all German
11 farmland. If less high-quality habitat measures are chosen, then the area needed to
12 achieve the Favourable Reference Population would increase.

13 Typical agri-environment measures with a high effectiveness for Grey Partridges like the
14 biannual flower strips of Lower Saxony are being remunerated at 975 € per hectare
15 annually. If the Favourable Reference Population of the Grey Partridge was to be
16 achieved solely by the implementation of such agri-environment measures, this would
17 cost between 449 and 575 million EUR annually – from pillar 2 of the CAP. This amount
18 could be significantly reduced, if the new Common Agricultural Policy made 10% non-
19 productive areas of each farm (“Space for Nature”) compulsory as a pre-condition for
20 obtaining direct payments from pillar 1 of the CAP. Such 10% of all farmland areas
21 could be seen as areas with medium effective conservation measures for Grey Partridges,
22 thus significantly reducing the need for high-quality measures under pillar 2.

23

24 *Measures implemented to date*

25 In the EU CAP period of 2014-2020, all 13 federal states of Germany (city states
26 excluded) offer agri-environment schemes that benefit Grey Partridges. But only six
27 states offer schemes that can be implemented with the maximum benefit for Grey
28 Partridges and can therefore be considered high-quality measures. In none of states, the
29 scale of the measures implemented is anywhere near what is required to stop the
30 population decline let alone to achieve the Favourable Reference Population.

31 As shown in Tab. 5, in 2017, agri-environment measures with benefits for Grey
32 Partridges have been contracted on 82,428 ha with a total expenditure of 59.5
33 million EUR. Of these, high-quality measures were implemented on 27,162 ha with a
34 total expenditure of 20.5 million EUR. The latter is only 4.6 to 5.9% of the area and 3.6%
35 to 4.6% of the expenditure necessary to achieve a favourable state of conservation for the

1 Grey Partridge, if this state was to be achieved exclusively with high-quality agri-
2 environment measures.

3 Other aspects of the EU’s Common Agricultural Policy such as the current “Greening”
4 requirements under pillar 1 of the current CAP period have done very little to provide
5 additional quality habitat for Grey Partridges. However, introducing a 10% “Space for
6 Nature” component as a pre-condition for obtaining direct payments from pillar 1 of the
7 CAP could significantly reduce the expenditure necessary for targeted high-quality agri-
8 environment measures financed through pillar 2.

9 Tab. 5: Agri-environment schemes of the German federal states (city states excluded) with potential for
10 Grey Partridge conservation in the CAP period 2014-2020. The table includes high-quality
11 measures (as bi-annual flower blocks) as well as medium-quality measures like annual flower
12 strips, which do not have as strong a beneficial effect on partridge populations. Source: own
13 research by NABU

Federal state (north to south)	Description of the AES-measure (CAP period 2014-2020)	area of implemen- tation in ha (2017)	annual expendi- ture in EUR (2017)	Effective- ness for Grey Partridges (high or medium)	Remarks
Schleswig- Holstein	for arable habitats: Sowing of flower mixtures (750 €/ha) or self-sowing (625 €/ha); there is a special "Grey Partridge mixture", but the management requirement is new sowing in 3 of 5 years	3.841	2.806.000	medium	
Mecklenburg- Vorpommern	annual and multi-annual flower strips (both 680 €/ha); costs for multi-annual flower strips higher, therefore very few contracts for the multi-annual option	2.000	1.000.000	medium	data of 2016, mostly medium-quality measure
Niedersachsen	struktur-rich flower strip (up to 975 €), partridge-oriented management: 30-50% re-sown each spring	4.439	3.672.180	high	
	multi-annual flower strips	795	644.552	medium	
	protection strips for arable weeds	629	846.945	medium	
	protection strips for hamsters	15	17.458	medium	
	protection strips for Ortolan Buntings	729	759.383	medium	
	protection strips for Red Kites	548	550.092	medium	
	protective strips for water courses and erosion	84	41.716	medium	
	annual flower strips	9.538	9.988.715	medium	
Brandenburg	no flower strip measures; tests of partridge-oriented management within greening	0	0		very few partridges left
Sachsen Anhalt	multi-annual flower strips (mowing in 1st year from July recommended, later mowing of 50-70% mähen) (850 €/ha)	2.200	1.870.000	high	

Federal state (north to south)	Description of the AES-measure (CAP period 2014-2020)	area of implemen- tation in ha (2017)	annual expendi- ture in EUR (2017)	Effective- ness for Grey Partridges (high or medium)	Remarks
Nordrhein- Westfalen	flower strips with flexible management options (1200 €/ha), incl. selection of plots by experts	5.300	5.800.000	high	mostly high-quality, but different implementation options, some of which less effective; other AES measures with medium effectiveness available
Hessen	annual flower strips	681	493.731	medium	other AES measures with medium effectiveness available
	multi-annual flower strips (600 €/ha, mown each Sep/Oct)	1.164	698.592	medium	other AES measures with medium effectiveness available
Thüringen	various measures with annual and multi-annual flower strips or set-asides (560-865 €/ha), but none of particularly suited to partridges	1.000	720.000	medium	uptake and average payment estimated
Sachsen	self-greening set-aside and flower blocks (annual and multi-annual), various options (607-835 €/ha)	14.746	11.659.000	medium	some varieties possible under this scheme could have high effectiveness
	nature-friendly arable crop management for farmland birds (581 EUR/ha)	1.992	871.000	medium	some varieties possible under this scheme could have high effectiveness
	winter stubble (100 EUR/ha)	4.836	484.000	medium	
Rheinland- Pfalz	flower strips/blocks, annual, bi-annual and multi-annual (390-1.000 €/ha)	1.389	735.417	high	not all variations highly effective for partridges
Saarland	flower blocks (whole parcels), only annual (600 €/ha)	no inf.	no inf.	medium	information on uptake and expenditure not obtained
Baden- Württemberg	set-aside sown with flower mixture, various combination of options possible, including one with high benefit for partridges (this option 930-1080 €/ha)	12.817	7.891.809	high	not all variations highly effective for partridges

Federal state (north to south)	Description of the AES-measure (CAP period 2014-2020)	area of implemen- tation in ha (2017)	annual expendi- ture in EUR (2017)	Effective- ness for Grey Partridges (high or medium)	Remarks
Bayern	annually rotating flower blocks	1.017	585.500	high	
	flower blocks near forest edge and on farmland	10.911	6.426.700	medium	
	set-aside on arable land with self- greening for species conservation	842	524.680	medium	
	extensive use of arable land for farmland birds and arable weeds	915	389.560	medium	
TOTAL		82.428	59.477.030		
sutotal	high-quality measures	27.162	20.554.906		
subtotal	medium quality measures	55.266	38.922.124		

1 Agri-environment measures are being implemented inside and outside protected areas
2 and Special Protection Areas for Birds (SPAs). The Grey Partridge is not a trigger
3 species for the identification and designation of SPAs, because it is not listed in Annex I
4 of the Birds Directive and is not a migratory bird species. Also, conservation of the
5 species largely depends on farmland practices mainly influenced by agriculture policy
6 and less by a possible conservation regime of a protected area. Still, the designated SPAs
7 for farmland birds can provide a useful focus for the implementation of targeted
8 conservation measures.

9 Tab. 6 lists all 36 of a total of 742 SPAs in Germany for which Grey Partridges are listed
10 in the Standard Data Forms (SDFs). These SPAs are located in seven different federal
11 states, whereas six federal states (city states excluded) do not list the species in any of the
12 Standard Data Forms for their SPAs, amongst them Niedersachsen, Nordrhein-Westfalen
13 and Bayern, which hold the largest regional populations of the species.

14 NABU has made a preliminary assessment, whether a certain species should be
15 considered a target species of an SPA or not. It should be a target species if it is referred
16 to as such in any official document like the SDFs, directive for the designation of the
17 sites or management plans or if the SPA overlaps with an Important Bird Area for which
18 the Grey Partridge is a qualifying species. According to this, the Grey Partridge should
19 be a target species for 10 of the 36 SPAs listed. However, responses to an official inquiry
20 of NABU to the responsible regional conservation authorities show, that the Grey
21 Partridge is not considered a target species for any SPA in any federal state. Grey
22 Partridge population figures are only available for three SPAs in Sachsen-Anhalt for a
23 single year. This shows that the Grey Partridge is not included in any regular monitoring
24 programme of SPA bird populations in all but possibly three SPAs.

1 It therefore needs to be concluded that Grey Partridges are generally not considered as
2 target species of SPAs in Germany and are not included in regular SPA monitoring
3 schemes. Therefore, SPAs do not seem to be used as a tool to further the conservation of
4 Grey Partridges in Germany.

5 NABU is nonetheless also convinced that by including the species of the Grey Partridge
6 in the SDFs of the SPAs, Germany triggered a certain protection arising from Art. 6 of
7 the Habitats Directive that then also needs to be applied to this species in the SPAs
8 concerned. This interpretation can also be found in the Commission guidance on
9 “Managing Natura 2000 sites” (European Commission 2020). Its paragraph 2.3.1 states:
10 "In principle conservation objectives should be set for each site and for all species and
11 habitat types significantly present on each site. They should be based on the ecological
12 requirements of the species and habitats present and should define the desired
13 conservation condition of these species and habitat types on the site. They should be
14 established in function of the conservation assessment of each species and habitat type as
15 recorded in the Standard Data Form." Accordingly, there should be conservation
16 objectives set for the Grey Partridge in all of the 36 SPAs, where it is listed in the
17 Standard Data Form, and in any case for at least the 10 sites, where the Grey Partridge
18 appears to be an important target species for the SPA.

19 There are also no conservation objectives or species action plans for the Grey Partridge
20 on any higher level like federal states or the national level.

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Tab. 6: The table lists all 36 of a total of 742 SPAs in Germany for which Grey Partridges are listed in the Standard Data Forms. These SPAs are located in seven different federal states. The last column indicates an assessment by NABU, whether the Grey Partridge should be considered a special target species for conservation, either because it is mentioned as such in an official document or because it overlaps with an Important Bird Area that has the species as a qualifying species. Source: NABU database

Code_SPA	SPA_name	Bundesland	target species (NABU)
DE1123-491	Flensburger Förde	Schleswig-Holstein	yes
DE1530-491	Östliche Kieler Bucht	Schleswig-Holstein	yes
DE1725-401	NSG Ahrensee und nordöstlicher Westensee	Schleswig-Holstein	yes
DE2031-401	Traveförde	Schleswig-Holstein	yes
DE2331-491	Schaalsee-Gebiet	Schleswig-Holstein	yes
DE2530-421	Langenlehsten	Schleswig-Holstein	yes
DE3432-401	Feldflur bei Kusey	Sachsen-Anhalt	no
DE3437-401	Elbaue Jerichow	Sachsen-Anhalt	yes
DE3532-401	Vogelschutzgebiet Drömling	Sachsen-Anhalt	no
DE3635-401	Vogelschutzgebiet Colbitz-Letzlinger Heide	Sachsen-Anhalt	no
DE3639-401	Vogelschutzgebiet Fiener Bruch	Sachsen-Anhalt	yes
DE3938-401	Zerbster Land	Sachsen-Anhalt	no
DE4134-401	Hakel	Sachsen-Anhalt	no
DE4428-302	Ellersystem - Weilröder Wald - Sülzensee	Thüringen	no
DE4430-420	Südhazer Gipskarst	Thüringen	no
DE4527-420	Untereichsfeld - Ohmgebirge	Thüringen	no
DE4531-403	Kyffhäuser - Badraer Schweiz - Helmestausee	Thüringen	no
DE4536-401	Salziger See und Salzatal	Sachsen-Anhalt	no
DE4552-452	Muskauer und Neustädter Heide	Sachsen	yes
DE4632-420	Hainleite - Westliche Schmücke	Thüringen	no
DE4633-420	Helme-Unstrut-Niederung	Thüringen	no
DE4831-401	Gera-Unstrut-Niederung um Straußfurt	Thüringen	no
DE4930-420	Ackerhügelland westlich Erfurt mit Fahnerscher Höhe	Thüringen	no
DE4933-420	Ackerhügelland nördlich Weimar mit Ettersberg	Thüringen	no
DE5032-420	Muschelkalkgebiet südöstlich Erfurt	Thüringen	no
DE5135-420	Muschelkalkhänge der westlichen Saaleplatte	Thüringen	no
DE5231-304	Große Luppe - Reinsberge - Veronikaberg	Thüringen	no
DE5326-401	Thüringische Rhön	Thüringen	no
DE5417-401	Lahnaue zwischen Atzbach und Gießen	Hessen	no
DE5428-303	Herpfer Wald - Berkeser Wald - Stillberg	Thüringen	no
DE5628-303	Grenzstreifen am Galgenberg - Milzgrund - Warthügel	Thüringen	no
DE5730-420	Rodachau mit Bischofsau und Althellinger Grund	Thüringen	no
DE6014-403	Ober-Hilbersheimer Plateau	Rheinland-Pfalz	yes
DE6316-401	Lampertheimer Altrhein	Hessen	no
DE6409-303	Hofberg bei Reitscheid	Saarland	no
DE6609-308	Beedener Bruch	Saarland	no

1 9.9. Summary of the facts giving rise to complaint

2 The detailed account in this chapter 9 has provided evidence that

- 3 a) the national populations and the distribution of the species concerned are not
4 meeting adequate levels according to Article 2 of the Birds Directive in Germany
5 and are declining,
6 b) that these declines are mainly caused by deterioration of the breeding habitat,
7 c) that measures are available to halt and reverse the decline of the species
8 concerned, and
9 d) that these measures have not been used to a sufficient extent to date.

10 as follows:

11
12 *The national populations and the distribution of the species concerned are not meeting*
13 *adequate levels according to Article 2 of the Birds Directive in Germany and are*
14 *declining.*

15 The Grey partridge used to be a common farmland bird distributed over all the farmland
16 of Germany below 500 m above sea level. After strong declines, the current population
17 size of the Grey Partridge is estimated at 21.000 to 37.000 breeding pairs for the year
18 2016. The long-term population trend (1980-2016) is minus 91% and still declining.
19 Therefore, the national population of 1980, when the Birds Directive came into force,
20 was between 233,000 and 411,000 pairs. During the same period, the distribution of the
21 species in Germany decreased by 26 to 65%.

22 Hunting bag statistics for Grey Partridges reach back to the year 1954. According to
23 these figures, the national partridge population of 1980 was already only about 10% of
24 the population of the 1950ies. Therefore, the current population is only about 1% of the
25 population of the 1950ies.

26 The Favourable Reference Value for the national population in an adequate state of
27 conservation is being calculated based on potential habitat availability in a realistic but
28 ambitious landscape scenario for the year 2050 as between 335,000 and 421,000 pairs,
29 which incidentally is similar to the national population of 1980 (233,000 to 411,000
30 pairs).

31 Hence, the current national population amounts to only between 5% and 11% of the
32 Favourable Reference Value for Population.

33

1 *The declines are mainly caused by deterioration of the breeding habitat*

2 The reasons for the Europe-wide decline in Grey Partridges are well studied. Two main
3 reasons are responsible for the decline: use of pesticides and changes in landscape
4 structure, both of which are promoting predation as a third reason of decline.

5 Pesticide use (both herbicides and insecticides) are the reason for a reduced abundance of
6 insects as food for the chicks. Population modelling has shown that declines in Grey
7 Partridge populations could be wholly explained by herbicide-induced reductions in prey
8 availability causing reduced growth and survival of Grey Partridge chicks.

9 The use of pesticides on crops made partridges more dependent on permanent, uncropped
10 and unsprayed vegetation: mostly margins, grassy paths, and fallow land. The availability
11 of these non-productive areas, however, has severely declined.

12 The forced retreat of partridges into narrow and linear marginal habitats has made the
13 species more vulnerable to predation. At the same time, the reduced chick productivity
14 robs the species of its evolutionary ability to make up for losses through predation by
15 high productivity. Therefore, predation has to be viewed as a secondary threat to the
16 population brought about by pesticide use and changes in landscape structure.

17

18 *Measures are available to halt and reverse the decline of the species concerned*

19 Measures to improve habitat conditions for partridges have already been tested and
20 proven to be highly effective. Key to the conservation of the species is the provision of
21 nesting cover in the form of unsprayed insect-rich permanent vegetation for the females
22 and chick-rearing cover in the form of unsprayed annual vegetation, ideally in very close
23 vicinity. Both has been combined in an exemplary agri-environment measure, the so-
24 called “bi-annual flower blocks” currently already implemented in Niedersachsen (Lower
25 Saxony). In this scheme alternating halves of the flower blocks are being re-sown in
26 spring, thus always creating an annual and a bi-annual vegetation block side by side.

27 1.5 hectares of additional high quality habitat (such as bi-annual flower blocks) are
28 necessary for each additional pair of partridges.

29

30 *Measures have not been used to a sufficient extent to date.*

31 To achieve the Favourable Reference Population (FRP) additional high-quality habitat of
32 between 460,000 ha (4,600 km²) and 590,000 ha (5,900 km²) is needed. This would be
33 equal to 2.5% to 3.2% of all German farmland.

1 Typical agri-environment measures with a high effectiveness for Grey Partridges like the
2 biannual flower strips of Lower Saxony are being remunerated at 975 € per hectare
3 annually. To achieve the Favourable Reference Population of the Grey Partridge solely
4 by the implementation of such agri-environment measures would cost between 449 and
5 575 million EUR annually – which could be taken e.g. from pillar 2 of the CAP. This
6 amount could be significantly reduced, if the new Common Agricultural Policy made
7 10% non-productive areas of each farm (“Space for Nature”) compulsory as a pre-
8 condition for obtaining direct payments from pillar 1 of the CAP.

9 In the EU CAP period of 2014-2020, all 13 federal states of Germany (city states
10 excluded) offer agri-environment schemes that benefit Grey Partridges. But only six
11 states offer schemes that can be implemented with the maximum benefit for Grey
12 Partridges and can therefore be considered high-quality measures.

13 In 2017, agri-environment measures with benefits for Grey Partridges have been
14 contracted on 82,428 ha with a total expenditure of 59.5 million EUR. Of these, high-
15 quality measures were implemented on 27,162 ha with a total expenditure of 20.5 million
16 EUR. The latter is only 4.6 to 5.9% of the area and 3.6% to 4.6% of the expenditure
17 necessary to achieve a favourable state of conservation for the Grey Partridge, if this state
18 was to be achieved exclusively with high-quality agri-environment measures.

19

1 **10. Where appropriate, mention the involvement of a Community funding scheme**
2 **(with references if possible) from which the Member State concerned benefits**
3 **or stands to benefit, in relation to the facts giving rise to the complaint:**
4

5 First of all, NABU wants to stress that the provisions of the EU Birds Directive referred
6 to in this complaint are effective, valid and in force as such, and not dependent on or
7 conditional to funding provided by the EU. In the end, Germany also has to use its
8 national budget to comply with the provisions of the Birds Directive which Germany
9 agreed on when adopting the directive.

10 The matter of this complaint is closely linked to EU-funding under its Common
11 Agricultural Policy (CAP), because the habitat used by the species concerned in this
12 complaint is classified as agricultural land and therefore subject to the rules and
13 regulations as well as funding schemes that comprise the CAP. Thereby, the CAP
14 provides incentives that drive the threat factors and lead to deterioration of the habitats.
15 This is mainly because it focuses on hectare-based flatrate-payments (direct payments
16 under pillar 1), that incentivise farmers for using all their land as intensively used
17 agricultural land with very limited conditions in order to receive the subsidies. On the
18 other hand, the CAP in theory also provides tools that, if used to its full extent by the
19 relevant authorities, could contribute to solving the problem of habitat deterioration and
20 even contribute to the financing of habitat restoration for the species in question.
21 However, past experience has shown that just having the theoretical toolbox for
22 conservation measures at hand is not sufficient for Member States to actually make use
23 of them when programming the CAP implementation.

24 Through the first pillar of the CAP, direct payments are paid to farmers. These payments
25 are subject to them obeying “good agricultural practice” defined within the CAP’s cross
26 compliance rules. These cross compliance rules included according to EU regulation
27 1306/2013 of 17 December 2013 the complying with the articles 3.1, 3.2(b), 4.1, 4.2 and
28 4.4 of the EU Birds Directive.

29 As outlined under chapter 9 of this complaint, the articles of the Birds Directive, which
30 the complainant considers Germany to infringe, include articles 3.1 and 3.2(b), i.e.
31 exactly those that form part of the cross compliance rules applying to every recipient of
32 EU-funding in form of direct payments under the CAP. Therefore, it should be expected,
33 that numerous recipients of these direct payments are being denied these payments for
34 non-compliance with cross compliance rules referring to the Birds Directive articles
35 included in these rules. However, not a single case like that has come to the attention of
36 the complainant to date.

37 The second pillar of the CAP provides member states with possibilities to support
38 activities aimed to achieve environmental and nature conservation objectives. In
39 particular, EU co-funding provided under this second pillar is used in Germany to fund

1 voluntary agri-environment schemes including those aimed generally at the conservation
2 of farmland bird and those specifically targeted at the species concerned by this
3 complaint. These schemes currently comprise the majority of activities implemented by
4 German responsible authorities for the conservation of the species in question. However,
5 as the continued decline of the species is proving, these schemes alone are not sufficient
6 to achieve the aims. Another option, paying compensations for restrictions (according to
7 CAP 2014-2020) resulting from the land being inside Natura 2000 sites exists under this
8 pillar. It can be shown, that Germany is not using the full potential of EU co-funding to
9 set-up effective and sufficiently funded schemes to protect the Grey Partridge and other
10 farmland birds. In particular, Germany did not make use of the full spectrum granted to
11 shift CAP funds from pillar 1 to pillar 2.

12 Outside the CAP, the EU provides funding through the EU LIFE programme that can be
13 used to maintain, improve or restore habitats of the species concerned. A search of the
14 LIFE database available under <http://ec.europa.eu/environment/life/project/Projects/> has
15 resulted in only one LIFE Projects specifically targeting the Grey Partridge. This is
16 project LIFE17 NAT/IT/000588 aiming at the reintroduction of the species in Italy,
17 where it had become extinct. This ongoing project is expected to receive EU co-funding
18 of 3.8 m €. While this project is believed to result in improved conservation status of the
19 species concerned in the area covered by the project, the number of these projects is far
20 too small to halt to decline of these species. Again, the responsible authorities in
21 Germany are not using the full potential of the LIFE programme for the conservation of
22 the Grey Partridge.

23 EU regional funds also provide the opportunity for German authorities to provide
24 funding for the conservation of Grey Partridge and its habitat.

25 Currently a multi-national project named „PARTRIDGE“ receives funding under the
26 North Sea Region INTERREG Programme (see <https://northsearegion.eu/partridge>). This
27 very important project has been able to provide and test much of the evidence used in this
28 complaint.

29 Beyond this project, however, according to the knowledge of the complainant, this
30 opportunity is not being used to any considerable degree.

31

32 **11. Details of any approaches already made to the Commission's services**
33 **(if possible, attach copies of correspondence):**
34

35 Another complaint concerning the same systematic failure in the implementation of the
36 Birds Directive has been submitted by NABU in 2014. It is registered under CHAP
37 (2014) 01471 and regards the failure of Germany to achieve adequate populations levels
38 for four meadow-breeding wader species (Lapwing, Curlew, Snipe and Black-tailed
39 Godwit).

1 NABU in cooperation with its umbrella organisation BirdLife Europe has for many years
2 been in contact with the Commission regarding the shaping of the CAP, the LIFE
3 Programme and Regional Funds in order to ensure, these programmes are not detrimental
4 to the conservation of farmland birds and in turn provide sufficient opportunities to
5 promote the conservation of these species and their habitats. The following is a non-
6 exclusive list of approaches made by NABU and its umbrella BirdLife Europe on these
7 matters directly to the European Commission in recent years. The hyperlinks given lead
8 directly to the related documents:

- 9 • 2016: [CAP fitness check letter with 110+ NGOs](#)
- 10 • 2017: Response of “Stichting BirdLife Europe” to the Commission’s online
11 consultation on “Modernising and Simplifying the Common Agricultural Policy
12 (CAP)”, submitted on 28/04/2017
- 13 • 2018: [BirdLife Europe & European Environmental Bureau open letter to EU
14 Ministers of Agriculture ahead of 19 Feb Agri Council](#)
- 15 • 2018: [NGO letter to Vice-President Timmermans on CAP objectives](#) (08/05/18)
- 16 • 2018: [NGO letter to Directors general on the leak of the CAP post 2020](#)
- 17 • 2019: NGO [Open letter to the AGRIFISH Council](#) (11/03/2019)
- 18 • 2019: [NGO letter to EP COMAGRI ahead of their vote on CAP](#) (23/03/2019)
- 19 • 2019: [NGO open letter to President von der Leyen: For a real European Green
20 Deal, we must transform the CAP](#) (1/10/2019)

21 Additionally, the following BirdLife Europe positions relevant to the topics have been
22 published and have indirectly addressed the European Commission:

- 23 • CAP Position paper:
24 [http://www.birdlife.org/sites/default/files/attachments/cap_position_paper_v6_fin
25 al.pdf](http://www.birdlife.org/sites/default/files/attachments/cap_position_paper_v6_final.pdf)
- 26 • Evaluation of Rural Development programmes: [http://www.birdlife.org/europe-
27 and-central-asia/policy/event-hidden-truth-resources](http://www.birdlife.org/europe-and-central-asia/policy/event-hidden-truth-resources)
- 28 • Factsheets: 13 reasons for a green reform:
29 [http://www.birdlife.org/sites/default/files/attachments/Agriculture%20Factsheets
30 %20compiled.pdf](http://www.birdlife.org/sites/default/files/attachments/Agriculture%20Factsheets%20compiled.pdf)
- 31 • Factsheet on greening exemptions for the EU:
32 www.birdlife.org/sites/default/files/attachments/EU.pdf
- 33 • Factsheet on greening exemptions for DE:
34 www.birdlife.org/sites/default/files/attachments/Germany.pdf

35 To date, no official approaches have been made to the Commission services by the
36 complainant about the exact topic of this complaint, the inadequate and deteriorating
37 conservation state of Grey Partridges in Germany.

1 **12. Details of any approaches already made to other Community bodies or**
2 **authorities (e.g. European Parliament Committee on Petitions, European**
3 **Ombudsman). If possible, give the reference assigned to the complainant's**
4 **approach by the body concerned:**
5

6 No approaches have been made to date by the complainant to any other European Union
7 bodies in the matter of this complaint. NABU is nonetheless engaging at EU level, also
8 through its Brussels office within the BirdLife Europe facilities. NABU supported for
9 instance Parliamentary Questions of MEP Ska Keller relating to the long period of time
10 required to deal with the other ongoing NABU complaints (on grassland and meadow
11 birds) from 22 February 2018 (E-001093-18). NABU also organised, together with
12 BirdLife Europe and the EEB, events relating to enforcement of the EU Nature
13 Directives, e.g. an event in the European Parliament hosted by former MEP Jo Leinen
14 and Gerben-Jan Gerbrandy, entitled “Nature’s last line of defence”.

15
16 **13. Approaches already made to national authorities, whether central, regional or**
17 **local (if possible, attach copies of correspondence):**
18

19
20 **13.1 Administrative approaches (e.g. complaint to the relevant national**
21 **administrative authorities, whether central, regional or local, and/or to a**
22 **national or regional ombudsman):**
23

24 NABU is constantly working with national responsible administrative authorities on
25 national, regional and local level to promote the conservation of farmland birds and their
26 habitat.

27 At federal and regional level, NABU is advocating for more ambitious nature
28 conservation acts, including by initiating and supporting petitions for regional
29 referendums (“Volksbegehren”) to this end, and for more ambitious nature conservation
30 integrated into other national sectoral policies and laws such as the national pesticide or
31 fertilizer regulation and good practise of agriculture (“Gute fachliche Praxis”). NABU is
32 also actively working with national authorities to promote the use and financing of the
33 tool of “Species Action Plans” that is foreseen in the national conservation law, but
34 hardly used so far.

35 Administrative procedures are usually possible only on a case-by-case basis, where a
36 project or plan affects the conservation status of the birds in question and their habitat,
37 e.g. hydrological projects, placing of wind farms, road and other infrastructure projects or
38 the building or changes to seawalls. NABU is regularly engaged in such cases.

39 At the same time, administrative approaches to national authorities on the level of
40 national populations of species are not possible according to German law, even though

1 the respective EU legislation (in this case the Birds Directive) specifies clear targets for
2 these. This is why the first formal approach in the matter of this complaint is in fact this
3 complaint to the EU Commission itself.

4 Following submission of this complaint, NABU plans to submit official letters to the
5 national and regional responsible authorities in Germany, laying out the case of the
6 complaint and showing possible solutions that can be taken on the respective
7 administrative level. In these letters, NABU will amongst other things point out solutions
8 to be implemented within the national and regional programming of the CAP for the
9 coming period.

10 NABU is working to ensure suitable implementation of the CAP through the German
11 responsible authorities, especially on the relevant national and regional level of the
12 German Länder, to ensure these make optimal use of the possibilities provided within the
13 CAP for the conservation of farmland birds. In this context, NABU is e.g. engaging in
14 the process of drafting the new CAP strategic plan in a process facilitated by the German
15 Agriculture Ministry (BMEL).

16
17 **13.2 Recourse to national courts or other procedures (e.g. arbitration or**
18 **conciliation). (State whether there has already been a decision or award**
19 **and attach a copy if appropriate):**
20

21 As outlined above in chapter 13.1 of this document, access to national courts or
22 administrative procedures are usually possible only on a case-by-case basis, where a
23 project or plan affects the conservation status of the birds in question and their habitat
24 and therefore environmental organisations have the right to start court procedures.

25 At the same time, administrative approaches or court procedures are not possible
26 according to German law, when declines of species occur due to actions that are not
27 classified as plan or project and therefore do not need Environmental Impact
28 Assessments or other permissions, like regular agricultural activities, or when the
29 declines occur through the failure to implement sufficient conservation measures for the
30 species and their habitat. Nor is it possible to use administrative approaches or court
31 procedures to address declines of species and their habitats on a regional or national
32 level.

33 Even though it is obvious that the national responsible authorities have failed to ensure
34 an adequate conservation state for the species concerned in this complaint, there is no
35 access to national courts in such cases for conservation organisations according to current
36 German jurisdiction. The highest German administrative court
37 (Bundesverwaltungsgericht) still interprets the provisions of the Aarhus Convention and
38 in particular its Art. 9.3 in a restrictive way. Therefore, only a complaint to the EC

1 appears to be a suitable way to enforce the implementation of Art. 2 and 3 of the Birds
2 Directive in Germany.

3

4 **14. Specify any documents or evidence which may be submitted in support of the**
5 **complaint, including the national measures concerned (attach copies):**

6

7

Annex 1	List of References
----------------	--------------------

8

9

1 **15. Confidentiality (tick one box)¹:**
2

3 X "I authorise the Commission to disclose my identity in its contacts with the
4 authorities of the Member State against which the complaint is made."
5

6 "I request the Commission not to disclose my identity in its contacts with the
7 authorities of the Member State against which the complaint is made."
8
9

10 **16. Place, date and signature of complainant/representative:**
11

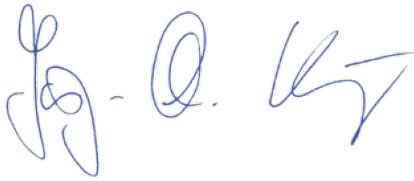
12 Berlin, 02/10/2020
13

14

15

16

17



18 Jörg-Andreas Krüger, President of NABU
19

¹ Please note that the disclosure of your identity by the Commission's services may, in some cases, be indispensable to the handling of the complaint.

1 (Explanatory note to appear on back of complaint form)

2
3 Each Member State is responsible for the implementation of Community law
4 (adoption of implementing measures before a specified deadline, conformity and correct
5 application) within its own legal system. Under the Treaties, the Commission of the
6 European Communities is responsible for ensuring that Community law is correctly
7 applied. Consequently, where a Member State fails to comply with Community law, the
8 Commission has powers of its own (action for non-compliance) to try to bring the
9 infringement to an end and, if necessary, may refer the case to the Court of Justice of the
10 European Communities. The Commission takes whatever action it deems appropriate in
11 response to either a complaint or indications of infringements which it detects itself.

12
13 Non-compliance means failure by a Member State to fulfil its obligations under
14 Community law, whether by action or by omission. The term State is taken to mean the
15 Member State which infringes Community law, irrespective of the authority - central,
16 regional or local - to which the non-compliance is attributable.

17
18 Anyone may lodge a complaint with the Commission against a Member State about
19 any measure (law, regulation or administrative action) or practice which they
20 consider incompatible with a provision or a principle of Community law. Complainants
21 do not have to demonstrate a formal interest in bringing proceedings. Neither do they
22 have to prove that they are principally and directly concerned by the infringement
23 complained of. To be admissible, a complaint has to relate to an infringement of
24 Community law by a Member State. It should be borne in mind that the Commission's
25 services may decide whether or not further action should be taken on a complaint in the
26 light of the rules and priorities laid down by the Commission for opening and pursuing
27 infringement procedures.

28
29 Anyone who considers a measure (law, regulation or administrative action) or
30 administrative practice to be incompatible with Community law is invited, before or at
31 the same time as lodging a complaint with the Commission, to seek redress from the
32 national administrative or judicial authorities (including the national or regional
33 ombudsman and/or arbitration and conciliation procedures available). The Commission
34 advises the prior use of such national means of redress, whether administrative, judicial
35 or other, before lodging a complaint with the Commission, because of the advantages
36 they may offer for complainants.

37
38 By using the means of redress available at national level, complainants should, as a rule,
39 be able to assert their rights more directly and more personally (e.g. a court order to an
40 administrative body, repeal of a national decision and/or damages) than they would
41 following an infringement procedure successfully brought by the Commission which
42 may take some time. Indeed, before referring a case to the Court of Justice, the
43 Commission is obliged to hold a series of contacts with the Member State concerned to
44 try to terminate the infringement.

1 Furthermore, any finding of an infringement by the Court of Justice has no impact on the
2 rights of the complainant, since it does not serve to resolve individual cases. It merely
3 obliges the Member State to comply with Community law. More specifically, any
4 individual claims for damages would have to be brought by complainants before the
5 national courts.

6
7 The following administrative guarantees exist for the benefit of the complainant:

- 8
9 (a) Once it has been registered with the Commission's Secretariat-General, any
10 complaint found admissible will be assigned an official reference number. An
11 acknowledgment bearing the reference number, which should be quoted in any
12 correspondence, will immediately be sent to the complainant. However, the
13 assignment of an official reference number to a complaint does not necessarily
14 mean that an infringement procedure will be opened against the Member State
15 in question.
16
17 (b) Where the Commission's services make representations to the authorities of the
18 Member State against which the complaint has been made, they will abide by the
19 choice made by the complainant in Section 15 of this form.
20
21 (c) The Commission will endeavour to take a decision on the substance (either to open
22 infringement proceedings or to close the case) within twelve months of registration
23 of the complaint with its Secretariat-General.
24
25 (d) The complainant will be notified in advance by the relevant department if it plans
26 to propose that the Commission close the case. The Commission's services will
27 keep the complainant informed of the course of any infringement procedure.
28
29
30

ANNEX 1

List of References

List of References

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