

European golden plover

Pluvialis apricaria



BASC's evidence review and recommendations for sustainable shooting

2023–2028 Recommendation

Current level of harvest and conservation effort to continue. No additional action required.

European golden plover – BASC recommendation

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Research required

- Monitoring the long-term impacts of afforestation in upland areas should be undertaken to understand long term impacts.
- Historic bag returns and the submission of current bag data to better inform harvest estimates (data can be submitted to the Game & Wildlife Conservation Trust (GWCT) National Gamebag Census or BASC Green Shoots Bagged It).

Shooting restrictions

- None

Habitat management

- Moorland management targeted at red grouse and peatland restoration appears to benefit the species, particularly creation of habitat mosaics.
- Creation of marshy areas in moorland encourages damp areas where plover chicks can feed.
- Targeted predator control in areas where known breeding populations exist.

Stage 2 assessment

Pluvialis apricaria – European golden plover

Species summary

The conservation status of the species remains favourable across its range. Marginal declines in some populations are thought to be driven by habitat changes, particularly afforestation and loss of breeding habitat⁵⁻⁸. Climate change is also considered a major contributing factor to plover population trends in recent years⁹⁻¹¹. Game bag numbers are small in the UK and there is no evident hunting-mediated driver of decline. Removal of the species from Schedule II may in fact result in a reduced incentive to undertake management that benefits this species.

Plover populations and trends within the UK and Europe are in a relatively stable position. However, with increasing impacts of climate change and continued agricultural change and afforestation, habitat changes are a threat to plover populations. Plover show broadly positive responses to moorland management for red grouse and agricultural management for all waders. Therefore, continued support and focus on restoration of breeding and foraging habitat in the uplands is important in retaining the species positive conservation status.

Species conservation status (see Table 1)

The European golden plover (herein plover) is a breeding resident in the UK whose population is boosted by over-wintering individuals from three different flyway populations (NW Europe, Iceland and UK/Denmark)¹. The UK breeding population appears to be stable (+0.18% between 2010–2020), which is the result of declines in England (-20.48%) and increases in Scotland (+12.77%)². The wintering population shows broad declines across all UK nations (-14% between 2008/09–2018/19), experienced most severely in Northern Ireland (-36%), followed by Wales (-19%), England (-12%) and Scotland (-10%)³. These declines are likely driven by population trends in migrant populations. Across the rest of its range, which stretches from eastern Europe and north Africa into Russia, the population is thought to be increasing, driving the overall positive global trend^{1,4}.

Hunting and harvest

The plover shooting seasons in the UK are compliant with the Key Concepts of Article 7(4)¹⁶. Plover have fluctuating bag trends in the UK, however these are quite low overall and the species is not amongst the most popular quarry species (1,300 in 2004, 5,100 in 2012 and 870 in 2016)¹⁷. Given the population size in the UK, this small harvest is likely to be sustainable¹⁸. However, population estimate for golden plover are considered unreliable, likely due to the large proportion of inland birds missed in WeBS counts¹⁹. There is also limited data available at the flyway-level hunting pressure on plover, however bag numbers historically have been highest in France²⁰.

Plover are sensitive to disturbance and show changes in behaviour as a result of recreation activities such as walking^{6,21} and hunting²². Hunting disturbance^{6,21} led to an increased frequency of flight and time spent vigilant, reducing resting time²². This leads to increased energetic costs and may result in reduced body condition²². The impact of such disturbance appears to impact plover during and after the hunting activity²². Other recreational disturbance such as walking off designated paths causes disturbance among plovers and results in their avoidance of paths during the chick-rearing period⁶. If disturbance during brood-rearing is continuous this is thought to impact chick survival²¹.

	BoCC ¹² (2020)	IUCN UK ¹² (2020)	Europe ¹³ (2021)	EU28 ¹³ (2021)	AEWA ¹⁴ (2018)	IUCN Global ⁴ (Last updated in 2016)
Category	G	LC	LC (B)	LC (B)	C1	LC
Trend (time period in brackets)	Breeding: Stable (2010–2020) Wintering: Decreasing (2008/09–2018/19)		Stable (over 3 generations)	Stable (over 3 generations)	UK: Decreasing NW Europe: Stable Iceland: Decreasing (2009–2018)	Increasing
Population size estimate Mature individuals	Breeding: 32,500–50,500 Pairs Wintering: 410,000 Individuals ¹⁵		1,660,000–2,310,000 (min-max)	415,000–676,000 (min-max)	UK: 110,000–170,000 NW Europe: 1,200,000–2,100,000 (min-max) Iceland: c. 1,200,000	1,260,000–1,720,000 (min-max)
Reason for category	n/a	n/a	n/a	n/a	All populations >100,000 and could significantly benefit from international cooperation but do not show declines, range contraction or data deficiency.	Population has large range & size alongside an increasing trend.
WeBS UK 10-year trend (2008/09–2018/19): -14% ³ • BBS UK 10-year trend (2010–2020): +0.18% ²						

Table 1. Species conservation status across different scales. *It has been highlighted by BASC that such automatic linkage between IUCN status and levels of protection by AEWA is directly contrary to the IUCN's advice on the use of its list.

Pressures, action and research

Pressures

Plover are primarily impacted by changes to habitat management or habitat loss. Increase in afforestation negatively impacts plover densities, with lower densities near forest edges⁵⁻⁸. This is likely due to increased predator abundance, including martens, foxes, and crows^{5,7}. As well as hydrological changes maturing woodland can have on surrounding habitat⁷. This is of particular concern with increasing afforestation programmes in upland areas^{5,7,10}. Changes in agricultural and moorland management have negatively impacted plover abundance, including reduction in open pasture where plover forage, and reduction of heather burning and sheep grazing, both of which create short sward habitat for plover when well managed^{9,23}. Development, particularly that of wind farms, has been shown to reduce the abundance of plover within close proximity to operational turbines^{1,24-26}. However, this was not shown to affect overall hatching and fledging success^{24,27}. Climate change is considered a major contributing factor to plover population trends in recent years⁹⁻¹¹. Advance in plover laying dates, which is already occurring, is expected to continue and may result in reduced survival as chick hatching becomes mis-matched with food availability (primarily craneflies)²⁸. Milder winters will likely drive distribution changes²⁹, and more severe winters will result in peaks in wintering numbers in the UK and Ireland as plover try to escape cold weather³⁰.

Practical action

Plover generally show increases in response to moorland management targeted at red grouse or peatland restoration^{23,31-33}. This includes creation of habitat mosaics comprising grass, rush and mixed age heather in moorland⁹. Grazing by sheep, at an appropriate pressure, or heather burning to create heterogeneous heather and grass habitat should also be a major part of moorland management prevent vegetation becoming too long and dense for breeding birds^{9,23,33,34}. However such habitat management should be accompanied by predator control^{9,33,35}. Predator control, particularly that of foxes and crows, can enhance breeding success of plover almost three-fold³². Creation of marshy areas in moorland by blocking drainage ditches will encourage rushes and damp areas where plover chicks can feed⁹. This may mitigate against some of the impacts of climate change on cranefly, the primary prey of plover^{35,36}. Environmental land management schemes should look to retain fields with high invertebrate abundances³⁴. This may also include summer grazing to enable grass sward heights to be <5cm and management of ditches and drainage systems to prevent over-drainage of fields³⁷. Forestry planning should consider buffer zones of >100's of metres adjacent to planned woodland and the impact plantations may have on open-ground habitat used by birds⁷. Hunting-free reserves with appropriate habitat for foraging and resting will help to mitigate against the disturbance effects of hunting²². Recreational disturbance can also be reduced by ensuring there are defined access points and well-maintained routes for walkers^{6,21}.

Research action

Better understanding of plover movement across the flyway, through ringing and reporting programmes would be beneficial^{10,38}. Particularly given possible distribution shifts due to habitat and climate change³⁸ and responses to severe cold weather¹⁰. Planning of windfarms should also continue to monitor the long-term impact of operational turbines on golden plover productivity. Afforestation programmes should also consider the edge-effects of forest creation on plover breeding grounds. The long-term impact of afforestation and potential changing dynamics as woodland matures should be monitored, especially with the increase afforestation programmes in upland areas^{5,7,10}. Improved recording and reporting of bag statistics will also enable evaluation of harvest sustainability in Europe¹⁰.

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