

Breeding birds on our doorstep

Several species of birds are expanding their breeding range in central Europe. Some of them have almost reached Switzerland. For new arrivals or former breeders to find a home here, it is critical that their habitats be sufficiently protected.

Today, it is hard to imagine that the Rook did not breed in Switzerland until 1963, and that the Eurasian Collared-dove became a native breeding bird as late as the 1950s^{VdS}. A species' overall distribution reflects the dynamics of its regional populations, which can be subject to major changes through time for reasons that are not always known. Some new arrivals to Switzerland benefit from an improved food supply owing to habitat changes. Similarly, climate change can impact a species' population size and distribution. In a handful of cases, international species recovery programmes involving public-awareness campaigns and measures for habitat management have initiated or at least supported phases of expansion. In other cases, the relevant factors remain in the dark.

The newest additions to Swiss avifauna

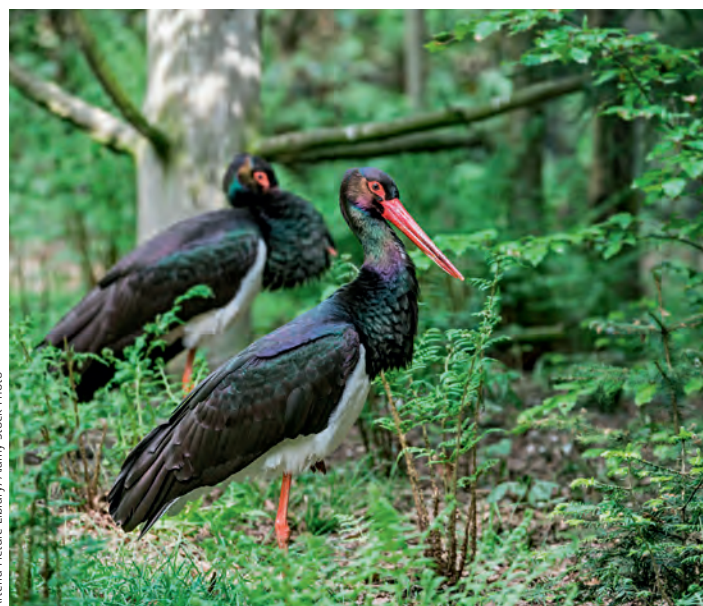
Often, there are signs that a species is about to establish itself as a breeding bird, such as a growing number of migrants or expansions in neighbouring areas. At the end of the 1993–1996 atlas period, several species were gaining ground just beyond our borders, including the White-backed Woodpecker and the Red-breasted Flycatcher; both species subsequently bred in the Prättigau GR in 1999 and 2003, respectively^{VdS}. More spectacular than these hesitant advances was the arrival of the Great Cormorant from 2001 onwards: 15 years after it had first bred in the Fanel BE/NE and after a strong expansion phase, 11 colonies with as many as 2099 breeding pairs were counted in Switzerland¹². The Short-toed Snake-eagle is another recent addition to the list of breeding

birds in Switzerland, presumably as a result of population increases in the Mediterranean^{10, 13}.

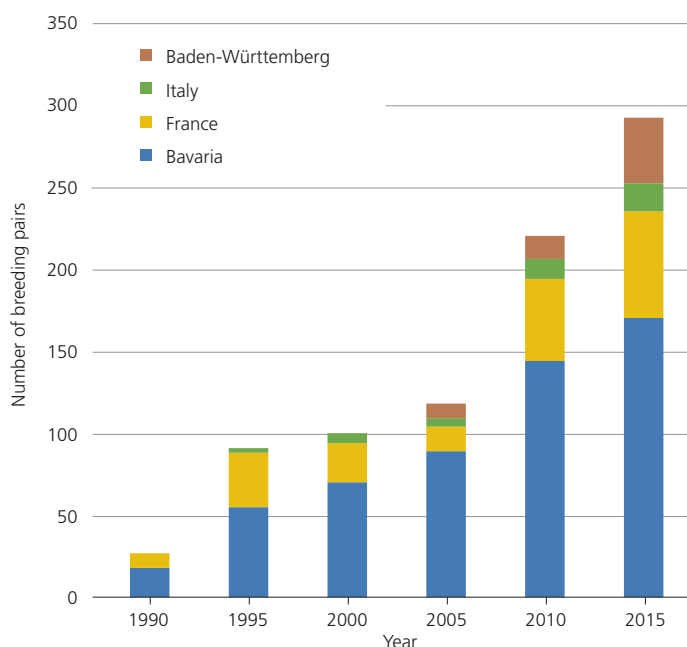
Will these species breed (again) in Switzerland?

After disappearing almost completely from central Europe, due mainly to persecution and intensified forest management, Black Stork populations recovered well throughout the continent in the second half of the 20th century, especially in the east^{VdS}. Waning hunting pressure and various conservation programmes, including protection of nest sites in the sub-Saharan wintering grounds, made recovery possible^{5, 6}. The closest nest sites in Germany, occupied since 2003, are only about 20 km from Lake Constance¹⁶. Although there are few areas of vast, undisturbed forest on the Central Plateau, recent summer observations suggest that the Black Stork may breed here in the near future. Support could come from spatial planning measures, such as restricting the construction of forest roads.

The Common Crane has extended its breeding range to the southwest since the 1960s, benefiting from the creation of sanctuaries and from public-awareness campaigns. Since the 19th century, and perhaps even earlier, the species has suffered the loss of its breeding grounds as large European plains were drained and turned into farmland^{VdS}. The Common Crane has bred again in France (Lorraine) since 1995, in Bavaria since 2002 and in Baden-Württemberg since 2016, only 45 km from Lake Constance^{Atf 1, 7, 11}. Occasional summering birds have been observed



During the breeding season, the Black Stork requires vast, undisturbed deciduous and mixed forests with scattered clearances and waterbodies.



Population trend of the Black Stork in neighbouring regions and countries.

Distribution of the Osprey in central Europe. Background map: Natural Earth, Stamen Design & OpenStreetMap.

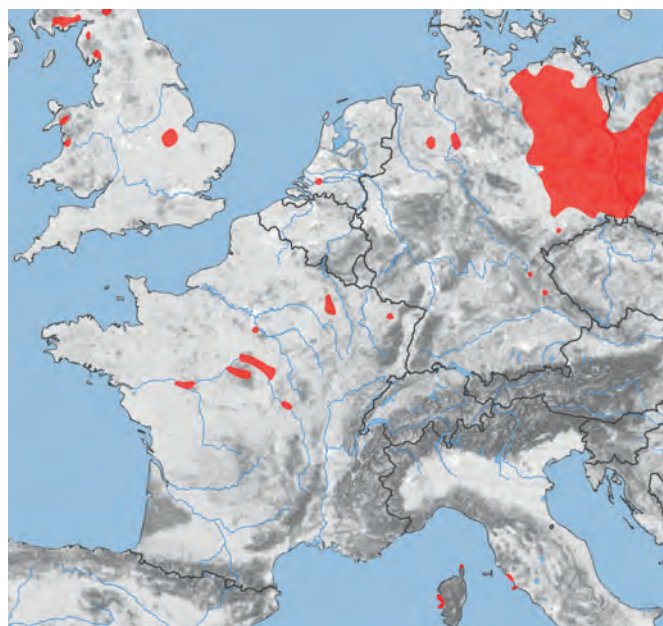
in Switzerland, but colonisation of the Swiss side of the Rhine is limited by the lack of large wetlands, mires and swampy forests.

We may also see the return of the Osprey, which bred in Switzerland until 1911. Since the 1970s, persecution has diminished, and the species now benefits from newly created nature reserves, the targeted protection of its nests, the supply of nesting platforms, and reintroduction schemes in several European countries¹⁴. It is slowly gaining ground in Bavaria and in France, where it breeds in Lorraine just 140 km from the Swiss border. A number of summer sightings have been reported in recent years. A reintroduction project is underway in the Seeland BE/FR with juveniles from Scotland, Germany and Norway^{14, 15}. Time will tell whether these efforts, combined with natural population dynamics, will allow the Osprey to resettle permanently in Switzerland.

Finally, Little Egrets and Cattle Egrets may also join the ranks of Swiss breeding birds in the near future. Both species have expanded their range in neighbouring areas of France and Italy^{Atf, 8}, and a breeding attempt by the Little Egret took place near Zug in 2014⁹.

Rich birdlife depends on high-quality habitats

It is hard to predict which species will be the next new addition to the Swiss avifauna. The following (incomplete) list names further candidates along with the closest breeding site that was occupied at least once during 2013–2016: Purple Swampphen (Dombes, 75 km), Griffon Vulture (Vercors, 160 km), White-tailed Sea-eagle



(department of Moselle, 150 km), Sardinian Warbler (Aosta Valley, less than 20 km away), and Black-headed Bunting (Lombardy, 110 km)^{AtD, Atf, 2, 3, 4}. If and when these species breed in Switzerland depends on the habitat quality we are able to offer. Keeping natural environments intact and preserving their diversity is critical. On a larger scale, conservation of breeding sites, migration routes and wintering grounds has first priority. These efforts must be sustained and intensified so that European breeding birds can continue to spread and claim new habitats.

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Cranes rely on undisturbed wetlands, mires and swampy forests to raise their young.

¹ Arbeitsgruppe Seltene Brutvögel Baden-Württemberg (2017); ² Bocca & Maffei (2010); ³ Brambilla (2015); ⁴ Crouzier (2017); ⁵ Diagona et al. (2006); ⁶ Gendre et al. (2016); ⁷ Hansbauer (2010); ⁸ Nardelli et al. (2015); ⁹ Martinez & Maumary (2016a–b); ¹⁰ Maumary et al. (2013); ¹¹ Mewes (2010); ¹² Müller (2017); ¹³ Rampazzi & Pagano (2017); ¹⁴ Strahm & Landenbergue (2013); ¹⁵ Strahm & Landenbergue (2018); ¹⁶ Trösch et al. (2013b)