

Biodiversity: When counting is preserving

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In today's societies, most quantification operations are performance-oriented. In the business world, these range from information intended for shareholders and other funders, to the numerous non-financial indicators that accompany strategy deployment. Performance measurement provides the basis for variable remuneration for an increasing number of employee categories and exerts a disciplining power over staff, often maintaining a high level of stress and ill-being at work (Ancelin-Bourguignon, 2018). In the public and non-profit sectors (e.g. health, education and culture), where values have traditionally been more important than quantifiable objectives, performance measurement now informs strategies, determines budgets and funding, and contributes to significant changes in business logic and career paths. Our private lives are also subject to quantification, whether that involves counting steps or calories, measuring social media influence, or using compatibility indicators on dating sites.

All these figures offer seemingly objective snapshots of social life. In doing so, they contribute to closing organisational debates that could arise from the juxtaposition of qualitative perspectives (Bourguignon, 2007). Furthermore, by reducing human beings and their activities to quantified entities and disregarding the issue of values, they are factors of dehumanisation. Finally, by emphasising the individual dimension of social activities, they

contribute to the weakening and sometimes dissolution of work and social collectives.

However, there is one area in which quantification serves a virtuous purpose: preserving biodiversity and beyond, ensuring the survival of our planet. Quantification is primarily realised through scientific protocols and, to a lesser extent, through opportunistic observations, i.e. observations made at random locations. Although data collection may be carried out by groups or individuals, subsequent conservation actions are always led by groups. The remainder of this text uses bird counting in France as an example. Unless stated otherwise, all figures are from 2024.

The bird observation and counting protocols in France are designed jointly by the National Museum of Natural History (MNHN, Muséum National d'Histoire Naturelle) and the LPO BirdLife association (lpo.fr). The LPO BirdLife operates nationwide through regional delegations (employing salaried staff) and local groups of volunteers, which implement the protocols across the country. For example, the Ile-de-France delegation hosts twenty local groups organised primarily by geographical area and, to a lesser extent, by species (such as sparrows and falcons). Data is entered into the association's database (www.faune-france.org), where it is distinguished between protocol and opportunistic data. The former feeds into national programmes. Since 1989, the Suivi Temporel des Oiseaux Communs (STOC) has

taken place in spring each year, the Suivi Hivernal des Oiseaux Communs (SHOC) has taken place each winter since 2014, and the Estimation des Populations d'Oiseaux Communs (EPOC) has run all year round since 2017. Protocols also nurture international programmes, such as the Wetlands International programme dedicated to wintering waterbirds. Ad hoc programmes are also developed over time based on specific protection needs, for example regarding birds of prey, lapwings and plovers, swallows and swifts, and hoopoes.

Data serves several purposes. Initially, it is used to update the national inventory of breeding and wintering birds (Atlas of French Birds, oiseauxdefrance.org), including those in overseas territories. It is also used to quantify changes in bird populations. Thus Fontaine et al. (2020) analysed trends over a 30-year period (1989–2019) among 123 common breeding species using data from the STOC programme:

32 species have expanded and 43 have declined.

Populations of species that nest in urban areas declined by 28%, primarily due to the conversion of buildings and renovation of façades destroying the cavities in which certain species nest; the increasing artificialisation of urban environments; intensification of agriculture near urban areas reducing food resources (especially insects and seeds in winter) and pollution from transport and industrial activities.

In forested areas, populations have only declined by 10%, which can be explained by the overall increase in forest area linked to the abandonment of agriculture and changes in forest management practices that favour the retention of old or dead trees, thus benefiting insects and consequently birds.

Populations of birds inhabiting agricultural environments have suffered the largest decline of 30% since 1989, mainly due to pesticides and habitat loss, particularly hedgerows in intensively farmed areas.

Generalist species that can adapt to a wide range of environments are faring better than specialist species. They are the only species whose population has increased, by around 19%. However, this positive trend masks a loss of diversity among

specialist species, as well as a relative stabilisation since 2006.

All these figures are nuanced by contrasting situations depending on the species.

French data also contribute to international studies, such as that by Rigal et al. (2003), which found that bird populations on the European continent have declined by an average of 25% over the past 40 years. The study also shows that more than half of bird populations in agricultural environments (57%) have disappeared due to the intensification of agricultural activities, such as the use of fertilisers and pesticides. Other contributing factors include urbanisation, rising temperatures and changes in forest cover.

The quantification of changes in bird populations means the extent to which species are threatened can be determined. Since 2008, the French Committee of the International Union for the Conservation of Nature (IUCN) has published the 'Red List' of threatened species, including all taxa (fauna, flora, fungi and corals), in collaboration with government and civil society organisations. A recent update of the Red List for mainland France reveals that 32% of its 284 breeding bird species are at risk of extinction. For the overseas territories, the figures vary but are broadly similar (IUCN France et al., 2024). Based on these analyses, a decree of 29 October 2009 established a list of 593 species and subspecies of birds protected throughout France and the conditions for that protection. Prohibited actions include the deliberate destruction or removal of nests and eggs; the destruction, capture or mutilation of birds; the deliberate disturbance of birds, particularly during reproduction and the dependency of young birds; the alteration or deterioration of breeding sites and resting places; and the keeping, transport, offer for sale, sale or purchase and commercial or non-commercial use of birds taken from the wild (www.legifrance.gouv.fr/loda/id/JORFTEXT000021384277).

Bird counting is also useful in supporting complaints filed by the LPO BirdLife regarding habitat destruction and the endangerment of protected species. Quantified evidence of the presence of species and nesting sites strengthens the case. The

database is an invaluable resource for the association's lawyers. For example, in 2023, the national railway company was fined €450,000 for clearing brush during the bird nesting season in 2019 (Angers Criminal Court, Maine-et-Loire).

Finally, the database can be used to document local initiatives aimed at protecting certain species. For instance, a local group of the Ile-de-France delegation has been protecting hen harriers in the 'French Vexin' region since 2011. These partial migrants, which travel to south-western France and the Iberian Peninsula, are birds of prey that nest in cereal crops on the ground. In the Vexin region, rising temperatures have brought forward harvest dates by more than two weeks over the last 20 years, while the timing of nesting has been delayed. This puts broods at risk, as the young are not yet able to fly by the time of harvest. Currently, only 30% of identified broods fledge before the harvest, meaning the remaining 70% require protection. The database is useful for identifying areas likely to host nesting sites in May. In June, the group identifies the plots more precisely and then uses a drone to locate the exact position of the nests. The vast majority of farmers agree to cooperate by maintaining contact with the ornithologist in charge of the protection programme until the day of the harvest. If the young are still in the nest, they also agree to allow wire guards to be installed to protect the broods from harvesters. Farmers also agree not to harvest in the immediate area around these shelters, and all nests are monitored until the chicks have fledged. Over the last three years, 38 pairs have been located, of which 25 have successfully bred. Of these, 14 required protection. A total of 67 young have fledged, 28 of which (42%) were protected.

Overall, bird counting contributes to the protection of biodiversity and, more broadly, to preserving the natural world. The resulting recommendations challenge the status quo and are therefore opposed by civil society, who often influence politicians. For example, until their definitive banning in May 2024 (www.conseil-etat.fr/en/arianeweb/CE/decision/2024-05-06/468145), traditional hunting practices were administratively authorised each summer in France, before being overturned each autumn

by the State Council, the French supreme administrative court. Similarly, in 2024 and 2025, the French government took steps backwards in its plan to reduce pesticide use due to pressure from farmers. This reversal is a prime example of how bird counting is at odds with the pursuit of profitability and performance. By mobilising thousands of volunteers and dozens of organisations at a national level, this quantification process fosters social connections that are becoming increasingly scarce in our societies, much like birds.

samedi, 18. mai 2024

La comblaise / Livilliers (95)

- **1 Busard Saint-Martin** (Circus cyaneus) 📄 🗺️ 📊 📍 [Eric Grosso 📄 📄]

Détail : 1x mâle adulte (vu posé)

Le champ aux hièbles / Hérouville (95)

- **2 Busards Saint-Martin** (Circus cyaneus) 📄 🗺️ 📊 📍 [Eric Grosso 📄 📄]

Remarque : passage de proie mais la femelle va se poser dans les pommiers, pas de retour au nid.

Détail : 1x mâle (en vol) / 1x femelle (vu posé)

Le haut du fay / Livilliers (95)

- **1 Busard Saint-Martin** (Circus cyaneus) 📄 🗺️ 📊 📍 [Eric Grosso 📄 📄]

Détail : 1x femelle (en vol)

Les grès / Vallangoujard (95)

- **2 Busards Saint-Martin** (Circus cyaneus) 📄 🗺️ 📊 📍 [Eric Grosso 📄 📄]

Détail : 1x mâle adulte (en vol) / 1x femelle (en vol)

vendredi, 17. mai 2024

Le poteau / Commeny (95)

The www.faune-france.org database.
Annick Ancelin-Bourguignon, France

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Young hen harriers in their protected nest.
Eric Grosso, France.