

## Hunting in Poland as part of the sustained development of rural areas

*Lesław Łabudzki* ✉, *Robert Kamieniarz*, *Grzegorz Górecki*, *Jacek Skubis*, *Anna Wierzbicka*

Department of Game Management and Forest Protection, August Cieszkowski Agricultural University, Wojska Polskiego 28, 60-637 Poznań, Poland, tel.: 4861 8487862, fax: 4861 8487865, e-mail: wl.kgl@up.poznan.pl, *Corresponding author.*

### ABSTRACT

Due to state ownership of both free game and most forests in Poland, large hunting districts and low number of hunters, hunting in Polish hunting grounds provides an opportunity to encounter many animal species, often in their almost natural environment. The qualities of Poland's fauna and flora as well as Poland's accession to the EU and the resulting ease of movement have contributed to the development of hunt tourism. As a consequence, there has been a rise in the demand for services offered by rural areas inhabitants, which in turn should make local communities recognize the need to preserve the natural environment.

### KEY WORDS

hunting, hunt tourism, rural areas

### INTRODUCTION

The ongoing changes in the environment, stemming from human activity, have interfered with complex environmental relations. Many fundamental ecosystems in Poland have lost their coherence and stability. Therefore, the activities that focus only on the exploitation of natural resources are simply unacceptable. On the other hand, the activities aiming at preserving the nature may not limit to a passive preservation. It is the active control of fauna, particularly of game populations, that is required. This stems from the fact that some game populations diminish in their size and range and therefore need preservation initiatives. However some well-adaptive species managed to increase their density or even spread to new areas. Such species have some impact on

their habitats, sometimes quite negative, leading to environmental or economic problems. Hence the need to increase their share in hunting plans.

Hunting has had a long history in Poland, and has been governed by a number of various regulations. Today's hunting has become not only an art based on tradition and history, but also a part of nature preservation policy. The principles currently in force were set out in the 'Hunting Law' Act of 1995, a law preceded by a several years' discussion in many circles, including that of the hunters. A definite decision was to preserve most basic principles of hunting that had been observed in Poland since the 1950s. According to the most important principle, free game is owned by the State Treasury. Furthermore, the hunting, as part of the natural environment protection policy, consists in the protection and

management of game populations in accordance with ecology principles and a rational agricultural, forest and fishing management. The central governmental body in charge of the hunting is the Environment Minister, while the field administration is the responsibility of local governments.

The hunting grounds in Poland are divided into hunting districts of not less than 3,000 hectares. Most of them (90%) are leased by groups of hunters (at least 10 people) who are obliged to be members of the Polish Hunting Association. The field districts (i.e. of wood rate less than 40%) are leased for 10-year periods by 'powiat' governments (second level of local government administration in Poland), while the forest districts are leased by regional forest management bodies. The lease rent, set out by the Environment Minister, depends on a district's quality. It is paid by hunters' associations to State Forests' bodies or local governments once a year, in proportion to the share of state forest or agricultural grounds and private forests. In addition to paying the lease rent, the hunters' associations are responsible for assessing the damage in crops caused by elks (*Alces alces* L.), red deers (*Cervus elaphus* L.), fallow deers (*Dama dama* L.), roe-deers (*Capreolus capreolus* L.) and wild boars (*Sus scrofa* L.) and paying compensations. On the other hand, the game hunted or trapped becomes the property of a hunters' association.

The volume of game taken in each district is set out in an annual hunting plan, drawn up by a hunters' association. The plan has to receive opinion from a local government and the Polish Hunting Association, followed by an a forest administration body approval. Annual hunting plans should aim at reaching the game volumes set out in long-term perspective in 10-year breeding plans issued by Regional Directorate of State Forest. The breeding plans cover individual breeding regions, comprising a dozen or a few dozens of hunting districts that are similar with respect to their natural environment and include whole areas with populations of big herbivores (elk, red deer, fallow deer and moufflon). If a hunters' association fails, without a legitimate reason, to follow the regulations set out in an annual hunting plan, it has to participate in forest preservation activities, to protect the forest from the damage caused by game (fences, repellents). Moreover, if the association disregards the rules of hunting management or a 10-year

breeding plan, it may lose the right to lengthen the lease for another 10 years.

The remaining 10% of hunting districts in Poland are governed by the State Forests, the Polish Hunting Association, and scientific or other entities, with a view to establishing Game Breeding Centres. Their role is to carry out research and introduction experiments, animal breeding for their settling or restoration, and hunting training. The centres' managers incur the same payments for using hunting grounds, but instead they become owners of the game taken there.

### SITUATION OF GAME

Considering wildlife as a national value, managing large hunting districts and breeding districts, coupled with a small number of hunters (4 hunters per 1,000 hectares of hunting areas), result in the limited impact of human presence on game populations in Poland. As a consequence, these populations have more 'natural' characteristics in Poland than in Western European countries. Some of the populations are marked by lower density, a more developed age structure, and high quality trophies. In addition, the species composition of fauna in Poland is still quite varied, which is undoubtedly one of the consequences of the state ownership of most forests in Poland, as large forest areas have been preserved both in highlands and in lowlands as well. Moreover, some forests, particularly in north-eastern Poland, have a nearly natural character. Therefore, hunts in Poland provide hunters with an opportunity to encounter many animal species, including mature specimens and bearing fine trophies, notably red deer and roe deer antlers. Another factor is that the hunt setting resembles the natural environment to a larger extent than in highly urbanized Western European countries with a dense network of motorways. Hence, when foreign hunters come to Poland they can be sure they will be able to get away from the hustle and bustle of city life and motorway traffic. Moreover, they know that the hunting lodges, numerous in many European countries, are still a rarity in Poland.

## BIG GAME

The most numerous big herbivore in Poland is roe deer, with population estimates at 0.7–1 million individuals (Fig. 1) (Pielowski 1999, GUS 2005). Although roe deer density and the number of individuals taken are lower than in many Poland's neighbours, it should be emphasized that 50% of males taken are more than 3 years old (Kamieniarczyk 2004), with some stags boasting medal trophies (Dziedzic 2005). Such animals can be found especially in eastern Poland where roe deer density is lower and harsher climate supports natural selection (Pielowski 1999). In hunting grounds in Poland also live numerous populations of wild boar (c. 180,000) and deer (c. 150,000 – GUS 2005). Both species populations are most numerous in western and northern Poland; large population of the latter can also be found in the Carpathians (Fig. 2 and 3). Apart from these big herbivores, typical for Europe, in Poland there are also natural elk populations (Fig. 4) and free herds of European bison (Fig. 5), the latter preserved from extinction thanks to Polish scientists, hunters and foresters. The elk, considered until 2001 as game with a whole-year close season, will soon be awarded a normal close season again, as its number and range has apparently increased due to withholding the taking by hunting in 2001 (Kamieniarczyk 2004). On the other hand, populations resettled by human are substantially smaller, with fallow deer estimated at 15,000 and moufflon at less than 2,000 (GUS 2005).

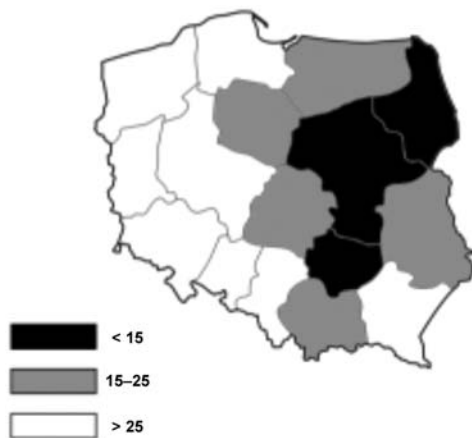


Fig. 1. Roe deer population density by provinces in Poland in 2005 (individuals per 1000 ha)



Fig. 2. Wild boar population density by provinces in Poland in 2005 (individuals per 1000 ha)

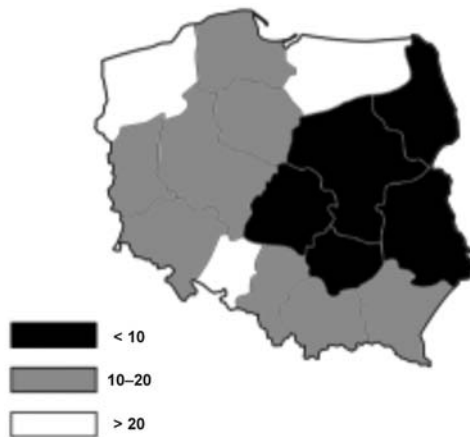


Fig. 3. Red deer population density by provinces in Poland in 2005 (individuals per 1000 ha)



Fig. 4. Elk populations by provinces in Poland in 2005 (number of individuals, blank – no population)



Fig. 5. Free herds of European bison in Poland in 2005 (number of individuals)

Polish forests' attractiveness is also contributed by natural populations of big predators, including bear, with c. 120 individuals in the Carpathian forests, lynx (c. 200 individuals), and wolf (c. 700 individuals), to be found both in the highlands and in large forest areas in the lowlands (GUS 2005). Also, a small number of wolves occurs regularly in western Poland, migrating also to Germany. The largest populations are to be found in the Carpathians and north-eastern Poland, where the raptor currently contributes to substantial damage to game and livestock animals (Łogin 2006). In this connection, voices were raised to enlist wolf among game species.

### SMALL GAME

The situation of small game is essentially worse. Since the 1990s, some species' populations decreased in number, particularly those typical for a farmland landscape. The decline notably concerns hare and partridge populations. In the 1970s, the number of these animals taken by hunting in Poland almost reached as much as 1 million, but today in most Poland's territory they ceased to be hunted (Fig. 6 and 7). Similar experiences have been gathered in most European countries. This mainly results from the unification of the agricultural landscape due to the intensified development of the arable land, unfavorable as it is for such animals (Pielowski *et al.* 1993). The rate of decrease in these species' populations was on the rise at the turn of the 21st century (Panek 2005, Kamieniarz and Panek 2002), as a consequence of the quickly rising fox populations, despite the multiply increased volume of foxes taken by Polish hunters

(Panek 2005). This was possible because of a successful limitation of rabies, an important factor of foxes' death, on most Poland's territory. Anti-rabies initiatives started in the mid-1990s in Poland as well as earlier in Western Europe, by means of vaccine bait scattered over forests and fields from airplanes.

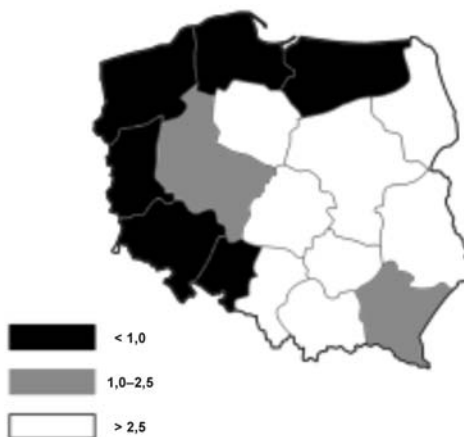


Fig. 6. Hare taking by provinces in Poland in 2005 (individuals per 1000 ha).

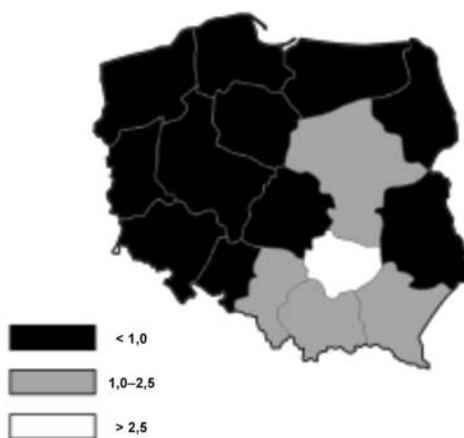


Fig. 7. Partridge taking by provinces in Poland in 2005 (individuals per 1000 ha).

### THE RELATIONS BETWEEN HUNTING POLICY AND THE DEVELOPMENT OF RURAL AREAS

The outlined sizes of some game populations in Polish forests, along with the EU integration, which facilitates coming to Poland by most European citizens, contribute to the development of hunt tourism. Most hunt tourists

tend to visit rural areas, which results in the increasing demand for services offered by rural communities, since both the hunters and those interested in the unique Polish nature want to keep out of the hustle and bustle of city life and tourist centres. They are most eager to stay at forest or farm lodges and often can pay as much as they would spend in a five-star hotel. However, they also demand certain standards of lodging, such as a private bathroom, day rooms and an outdoor place to enjoy peace and quiet during their holiday, as well as good cuisine, including local cuisines. Hence, foreign hunters and nature lovers' visits to Polish countryside often make locals lever their services' quality. This, in turn, should result in an inflow of more visitors in the future, as they recommend Polish countryside to their families, friends and colleagues. A side effect of hunt tourism is an increasing demand for handicraft products with elements of the hunting (e.g. shields for presenting trophies) or regional culture (wooden sculptures, hand-woven and glass ware).

Furthermore, hunts require local services, such as arranging a battue, transport (off-road vehicles, horses), and hunting dogs (for starting and tracking game). The hunting grounds which regularly host domestic and foreign hunters have more financial resources to manage the grounds, but at the same time they require more care as to the grounds' development. Hence the growing demand for farming services, including the development of fields for feeding game, and the cultivation of barriers in forests to reduce the damage in crops caused by game). A demand for farm products for feeding of wildlife is also on the rise. In the past, the feed was secured by hunters, whereas today most of it is bought from local suppliers. In addition to feed production, some farmers also take on storing and distributing the feed to some set locations across the hunting ground. This particularly applies to the owners of small farms who additionally work as guards or managers of hunting grounds, as most professional hunters in Poland are to be found among farmers.

Advantageous trends in hunt tourism can be sustained, provided that the appropriate number of game is maintained. It should not pose a problem as far as big game is concerned, but the situation of small game is essentially worse. One of the most important reasons for the current state of affairs is a continuing unification of the farmland landscape, stemming from crop intensi-

fication and a growing competitiveness within agriculture. A constant focus on improving economic outcome of the agricultural production results in considering, even 'by force', all non-forest areas as products. In Poland, the environment devastation rate in the farming grounds has increased since Poland acceded to the EU in 2004 and the area subsidies for farmers were introduced. For the purpose of extending the area under the subsidies scheme, tree-barriers between the fields have been cut, small ponds filled, and baulks (strips of land between fields, covered with natural flora) ploughed. As a consequence, elements of farming landscape and habitats of wildlife, birds' nesting sites, small vertebrates and numerous invertebrates. Such activities give evidence to low ecological consciousness among rural communities. Although the inhabitants of rural areas live close to the natural environment and use natural resources, they fail to understand the basics of ecology. Therefore, a more intensive promotion of the benefits that the development of tourism can bring to the Polish countryside, including the hunt tourism, could help change the current unfavourable situation. Actions need to be taken to make the rural communities understand that the tourism is driven not only by raising farm lodges' standards and other services but also by the state of the natural environment. Undoubtedly, it is the uniqueness of Polish flora and fauna that is usually the main incentive for the inhabitants of European cities to visit the Polish countryside.

The unfavourable state of the farming landscape can be improved by a greater use of the agri-environment schemes, which constitute a part of the EU Common Agriculture Policy. Such schemes aim at the improvement of the natural environment (reducing water pollution, wind erosion, etc.) and securing favourable living conditions for wildlife, particularly in areas where farming is not profitable due to natural conditions (e.g. marshy grounds or floodland). Unfortunately, these schemes have not yet gained due popularity in Poland among both large farm producers in western and northern Poland, and owners of small farms in central and eastern regions. Therefore, it seems essential that the hunters, who also use natural resources, should be involved in promoting the EU agri-environment schemes.

The obligatory membership of Polish hunters in the Polish Hunters' Association helps introduce large-scale programmes for the improvement of hunting



grounds' natural environment. An example of a successful programme that was introduced in recent years is the beaver restoration programme. The Polish Hunters' Association was one of the entities that carried out this well-prepared programme which contributed to the locally large sizes of beaver populations (Fig. 8), although in the 1950s this species was considered endangered. The number of beavers in Poland is estimated at over 40,000 individuals (GUS 2005). Due to the lack of sites for subsequent resettlements and occasional damages caused to some local farm and forest grounds, limited shots started in some regions with the view to reduce these animals' population. The species' presence directly and indirectly enriches biological diversity in Poland. Beavers change water levels, which in many cases has improved the natural qualities of biotopes damaged through draining following land reclamation. Thanks to beavers' activity, many species typical for water and seasonally flooded environments come back to their habitats. It also contributes to the improvement of functional and visual aspects of the rural landscape.

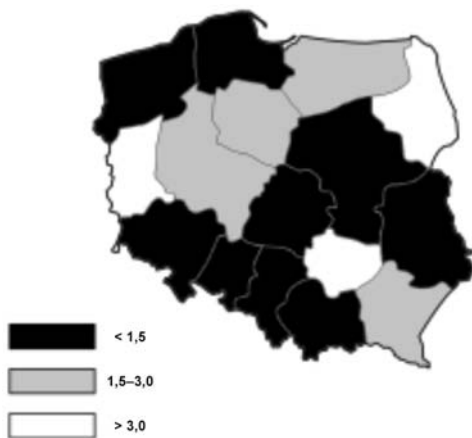


Fig. 8. Beaver populations by provinces in Poland in 2005 (individuals per 1000 ha)

Another example of a Poland-wide programme that was initiated by hunters' community in recent years is the "Revitalising Fields" programme, co-ordinated by the "Polish Hunter" magazine's editorial office. The programme aims at promoting the protection and development of a network of tree-barriers between the fields and is carried out by hunters' associations in liaison with schools, particularly those in rural areas. The education aspect of the programme contributes to improving the ecological consciousness among countrymen. This may constitute a chance for wildlife to survive in rural environments, which indirectly will help the sustained development of rural areas.

## REFERENCES

- Dziedzic R. 2005. Katalog trofeów łowieckich 2005. Łowiec Polski, Warszawa, Poland.
- Główny Urząd Statystyczny. 2005. Leśnictwo 2005. Zakład Wydawnictw Statystycznych, Warszawa, Poland.
- Kamieniarz R. 2004. Zwierzyna gruba w Polsce w latach 2001-2004. Leśnictwo, Opracowania GUS, Warszawa, 149-152.
- Kamieniarz R., Panek M. 2002. Sytuacja najważniejszych gatunków zwierzyny drobnej w Polsce w latach 1992-2002 (wyniki monitoringu). Leśnictwo. Opracowania GUS, Warszawa, 143-147.
- Łogin M. 2006. Wilczy problem. Łowiec Polski, 14-17.
- Panek M. 2005. Sytuacja zwierzyny drobnej w Polsce w latach 2001-2005. Leśnictwo 2005, GUS, Warszawa, 124-126.
- Pielowski Z. 1999. Sarna. Wydawnictwo Świat, Warszawa, Poland.
- Pielowski Z., Kamieniarz R., Panek M. 1993. Raport o zwierzętach łownych w Polsce. Biblioteka Monitoringu Środowiska, Warszawa, Poland.