

Text: Jerzy Downarowicz (Płock FD),
Dariusz Jankowski (RDSF Office in Łódź),
Arkadiusz Karbowski (RDSF Office in Łódź),
Paweł Kowalski (Piotrków FD),
Beata Lewandowska (RDSF Office in Łódź),
Katarzyna Lewańska-Tukaj (journalist),
Sylwester Lisek (Poddebice FD),
Marek Miścierewicz (RDSF Office in Łódź),
Prof. Romuald Olaczek (University of Łódź),
Gabriel Olejnik (RDSF Office in Łódź),
Cyprian Przyborowski (RDSF Office in Łódź),
Izabela Randak (Radomsko FD),
Mateusz Sarleja (Opoczno FD),
Maciej Siembor (RDSF Office in Łódź),
Prof. Piotr Zieliński (University of Łódź)

Photographs: Andrzej Adamczewski (p. 8)
Aleksander Grad (p. 45),
Marcin Kiedrzyński (pp. 20, 21),
Paweł Kowalski (pp. 13, 15),
Katarzyna Lewańska-Tukaj (p. 37),
Piotr Zieliński (pp. 10, 12),
Archives of the RDSF in Łódź (pp. 8, 14, 43, 46–49),
and Mirosław Sobkowiak (remaining)

Translation: James A. Richards

Text editing: Małgorzata Zygmunt

Cover design and interiors: Jerzy Dobrucki

Technical editing: Beata Świątnicka-Giluk

Correction: Ewa Moczarska

© Copyright by Oficyna Wydawnicza FOREST, 2020

ISBN 978-83-66162-17-4

Publisher:



Oficyna Wydawnicza FOREST
ul. Slikorskiego 7B, 05-410 Józefów
tel./fax 22 357 84 18
www.oficynaforest.pl

DTP: O.W. FOREST

Printing and binding: Drukarnia TAURUS



Belchatów Forest District
ul. Lipowa 175
97-400 Belchatów
tel. 44 635 72 81
e-mail: belchatow@lodz.lasy.gov.pl
www.belchatow.lodz.lasy.gov.pl

Brzeziny Forest District
Kaletnik
ul. Główna 3
95-040 Kozuski
tel. 44 714 69 88
e-mail: brzeziny@lodz.lasy.gov.pl
www.brzeziny.lodz.lasy.gov.pl

Gostynin Forest District
ul. Biegzewska 55
09-500 Gostynin
tel. 24 245 30 56
e-mail: gostynin@lodz.lasy.gov.pl
www.gostynin.lodz.lasy.gov.pl

Grotniki Forest District
ul. Ogrodnicza 6/8
95-100 Zgierz
tel. 42 716 42 59
e-mail: grotniki@lodz.lasy.gov.pl
www.grotniki.lodz.lasy.gov.pl

Kolumna Forest District
ul. Leśników Polskich 1c
98-100 Łask
tel. 43 675 42 06
e-mail: kolumna@lodz.lasy.gov.pl
www.kolumna.lodz.lasy.gov.pl

Kutno Forest District
Chłopsko 13
98-306 Łanięta
tel. 24 356 73 75
e-mail: kutno@lodz.lasy.gov.pl
www.kutno.lodz.lasy.gov.pl

Łask Forest District
ul. Lipowa 4
09-520 Łask
tel. 24 261 01 10
e-mail: lask@lodz.lasy.gov.pl
www.lask.lodz.lasy.gov.pl

Opoczno Forest District
Ślótowa 15
26-300 Opoczno
tel. 44 755 18 70
e-mail: opoczno@lodz.lasy.gov.pl
www.opoczno.lodz.lasy.gov.pl

Piotrków Forest District
Łęczno 101
07-330 Sulejów
tel. 24 645 18 40
e-mail: piotrkow@lodz.lasy.gov.pl
www.piotrkow.lodz.lasy.gov.pl

Płock Forest District
ul. Bielska 24
09-400 Płock
tel. 24 262 77 74
e-mail: plock@lodz.lasy.gov.pl
www.plock.lodz.lasy.gov.pl

Poddebice Forest District
Rodrysin 18a
98-200 Poddebice
tel. 43 675 42 75
e-mail: poddebice@lodz.lasy.gov.pl
www.poddebice.lodz.lasy.gov.pl

Przedbórz Forest District
ul. Konecka 50
97-570 Przedbórz
tel. 44 685 40 10
e-mail: przedborz@lodz.lasy.gov.pl
www.przedborz.lodz.lasy.gov.pl

Radomsko Forest District
ul. Piłsudskiego 3
97-500 Radomsko
tel. 44 883 20 10
e-mail: radomsko@lodz.lasy.gov.pl
www.radomsko.lodz.lasy.gov.pl

Radziwiłłów Forest District
ul. Senatorówka 2/2
96-330 Puszcza Marińska
tel. 46 831 01 10
e-mail: radziwillow@lodz.lasy.gov.pl
www.radziwillow.lodz.lasy.gov.pl

Skierniewice Forest District
Maków
ul. Zwierzyniec 2
96-100 Skierniewice
tel. 46 831 20 19
e-mail: skiernewice@lodz.lasy.gov.pl
www.skiernewice.lodz.lasy.gov.pl

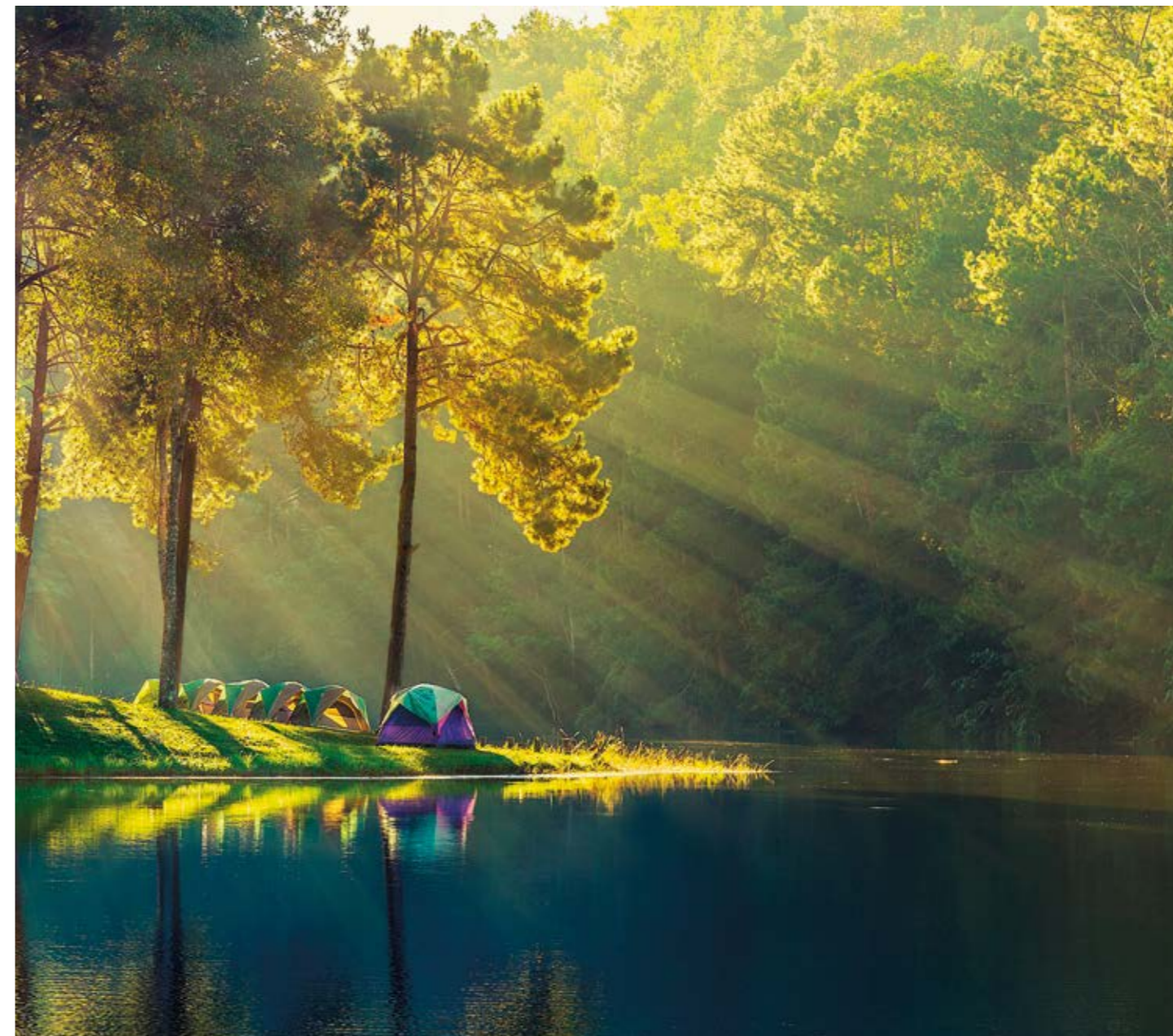
Smardzewice Forest District
ul. Główna 1a
97-213 Smardzewice
tel. 44 725 73 10
e-mail: smardzewice@lodz.lasy.gov.pl
www.smardzewice.lodz.lasy.gov.pl

Spala Forest District
ul. Gabrysiewicza 2
97-215 Inowódz
tel. 44 725 70 50
e-mail: spala@lodz.lasy.gov.pl
www.spala.lodz.lasy.gov.pl

Wieluń Forest District
ul. Żeromskiego 5
98-340 Wieluń
tel. 43 813 81 91
e-mail: wielun@lodz.lasy.gov.pl
www.wielun.lodz.lasy.gov.pl

Złoczew Forest District
ul. Parkowa 12
98-270 Złoczew
tel. 43 820 22 05
e-mail: zloczew@lodz.lasy.gov.pl
www.zloczew.lodz.lasy.gov.pl

FOREST - NATURE, THE ECONOMY, PEOPLE



Contents

NATURE CONSERVATION Romuald Olaczek 2

PRECIOUS STANDS Romuald Olaczek 6

THE RETURN OF THE WOLF Maciej Siembor 8

BLACK STORKS ONLINE Piotr Zieliński 10

FOREST HOSPITALS Paweł Kowalski, Jerzy Downarowicz 13

REINSTATING THE YEW Marek Miścierewicz 16

ENDANGERED PLANTS Maciej Siembor 18

THE FOREST FOR PEOPLE Arkadiusz Karbowski 22

WOOD FROM THE REGION'S FORESTS Dariusz Jankowski 26

ON PINES WE STAND Sylwester Lisek 30

HUNTING Beata Lewandowska 32

HUNTING GROUNDS TO PLATE Katarzyna Lewańska-Tukaj 36

THE STATE FORESTS AS AN EMPLOYER Cyprian Przyborowski 38

THE STATE FORESTS AS A TAXPAYER Cyprian Przyborowski 40

THE ANIELIN FORESTS Mateusz Sarleja 42

PLACES OF REMEMBRANCE 46

TO THE FOREST FOR OUR HEALTH Izabela Randak 50

ENSURING A SAFE FOREST Gabriel Olejnik 54

THE PROMOTIONAL FOREST COMPLEXES 56

LET'S BE IN TOUCH



telephone:
+ 48 42 631 79 00
+ 48 42 631 79 82



e-mail:
rdlp@lodz.lasy.gov.pl
www.lodz.lasy.gov.pl



address:
ul. Jana Matejki 16
91-402 Łódź

FOREST

NATURE, THE ECONOMY, PEOPLE



Regional Directorate
of the State Forests in Łódź



THE RDSF IN ŁÓDŹ

1000 are employed in the Directorate's 19 Forest Districts and at the Łódź Office. Two FDs have centres rehabilitating forest animals.



NATURE CONSERVATION

44% of the forest area within the RDSF is under different forms of protection. Around 128,260 ha! No fewer than 91 Nature Reserves form part of that.



FOREST EDUCATION

Each year 67,500 people get to know the forest better with foresters, on guided trips, or on workshops run at forest education rooms or at schools.



WOOD

The forests of Łódź RDSF supply 4% of the wood used in Poland each year.



A PLAGUE OF LITTER

Each year, foresters remove 5000m³ of litter and other rubbish from Łódź forests. That costs more than 1,000,000 PLN.



MORE FORESTS

18 million trees are planted in the Łódź RDSF each year. Forest cover in the region has risen from 15.2% in 1945 to 21.3% in 2020.



ON THE TRAIL

Lovers of active recreation have 3060 km of hiking and cycling trails to enjoy in the Łódź forests. Plus 877 km for those on horseback.



FOREST RELAXATION

Within the Łódź RDSF foresters have made ready some 139 stopping places, 9 camp sites, 53 hearths for bonfires, and 41 guest rooms in foresters' houses or hunting lodges.



75 YEARS HAVE PASSED



Dear Readers,
conveyed now into your hands is a publication that I feel presents the most interesting aspects of foresters' work for the Łódź Regional Directorate of the State Forests. While the impression given may be of subjects only loosely connected with one another, this is precisely our intention, as we would like you to become more aware of just how diverse the activities of the forester can be. It is my hope that the information offered here will prove interesting, and also serve as an insight into the mission forestry represents.

Nature conservation is one of the leading topics here. We are hosts and managers of land with Poland's most-limited forest cover, hence the great significance for society of the forests we do have, and especially the parts most valuable from a natural point of view. We strive to protect that nature, engaging in both passive protection – as we care for preserved sites for rare flora and fauna; and active protection – as we restore and reinstate lost elements of the environment, or apply management measures that favour natural processes we would like to see operating once again in the Łódź forests.

We also offer a reliable presentation of the economic aspects of our work, of foresters' input into the national economy, our social responsibility and contribution of taxes. Nor do we evade topics seen as more controversial – like hunting, as a part of forestry, and our heritage.

The Łódź RDSF celebrates its 75th anniversary in 2020. However, today's organisational division of the State Forests into Forest Districts, Regional Directorates and the General Directorate still closely reflects the structure conferred between the Wars, in Poland's Second Republic. The SF Directorate in Łódź dates back to January 1945, and in these 75 years a great deal of water has gone under the bridge, with administrative boundaries and numbers and sizes of Forest Districts all changing. And, first and foremost, the range of tasks assigned to foresters has changed. Several reorganisations ensured that, by the 1970s, our SF Regional Directorate had become the largest in the country. Back then, it had as many as 52 organisational entities under it.

But, while there have indeed been changes down the years, our fundamental operations remain the same. As foresters, we make use of what our predecessors left to us, while ourselves working for future generations. We attach great weight to our heritage, so there is no way we could omit the most famous figure linked with the Łódź forests – Cavalry Major Henryk Dobrzański (alias "Hubal"). We look to the future recalling this past.

I now wish you all a pleasant read, counting on the fact that this book will familiarise you with many aspects of our work, prove a source of interest, and allow for an understanding of the purpose and significance of all that we do.

Dariusz Pieniak
Director, Regional Directorate of the State Forests in Łódź



NATURE CONSERVATION

Romuald Olaczek

The forests of central Poland have key ecological and landscape functions in natural space. Some areas are protected because they represent primaeval forest, their ecosystems are natural, or they offer examples of former ways in which land was used.

The State Forests organisation regards conservation and environmental protection as basic parts of its mission. Indeed, in Forest Law, the pursuit of ecological forest management is formally placed ahead of caring for forests' productive and social functions. The mission is pursued on three levels, of which the first encompasses every single

area of forest and reflects provisions in the detailed management instructions foresters work by. Present there above all are the ideas of the persistence and continuity of forest, the enhancement and augmentation of forest resources, maintenance of the state of health of trees and habitat and biodiversity, and respect for naturalness.



NATURE RESERVES ACCOUNT FOR 2% OF THE ŁÓDŹ RDSF. ENJOYING PROTECTION WITHIN THEM:

species of forest tree occurring only rarely in the region, like the larch, yew or sycamore; as well as wild fruit trees like cherry, crab apple and pear; commemorative stands with age-old oaks; natural oak-lime-hornbeam forest and riparian forest; beechwoods, oakwoods and fir forests; places marking the natural limits of occurrence of beech and fir; forest streams representing attractive landscape features, and rare species of flora and fauna.

THE PROTECTION OF SUCH SITES IS A JOINT TASK FOR FORESTERS AND NATURALISTS.



THE TRĘBACZEW RESERVE
WAS FOUNDED IN 1958,
IN A PLACE WHERE LARCH
IN THE STAND WAS A RARE
AND VALUABLE PRESENCE.

Forest management is pursued in line with a management plan, drawn up for each Forest District every 10 years. The basis for this is provided by measurements and descriptions of stands, forest site types and plant communities.

The management plans are the subject of Environmental Impact Assessments, and each Forest District has its own associated nature-conservation plan. In the area managed by the Łódź RDSF, almost half of all stands are of Protective Forest. Here, the tasks are, i.a. to protect soil or water, to help make good the impacts of industry, or to assist with defence and security.

Poland's Nature Conservation Act provides for a further level of activity, for the land administered by the Łódź RDSF includes a whole network of protected areas and objects. There are refuges of Europe's *Natura 2000* system (40 sites covering a total of 14,572 ha protected under Polish and EU law); Nature Reserves (91 – covering 6005 ha); Landscape Parks (10 – covering 56,733 ha, offering possibilities for nature education and tourism); Nature-and-Landscape Complexes (24 areas totalling 2923 ha); Areas of Ecological Utility (1287 – covering 1520 ha in total); and



NATURA

2000

An old forest pond near Wola Błędowa (Grotniki FD). Today, this enjoys habitat protection in a *Natura 2000* site.



NATURE

RESERVES

The acid beechwoods on the Wrząca Reserve (Złoczew FD) represent an isolated area of beech in the interfluvium between the Rivers Warta and Proсна.



LANDSCAPE

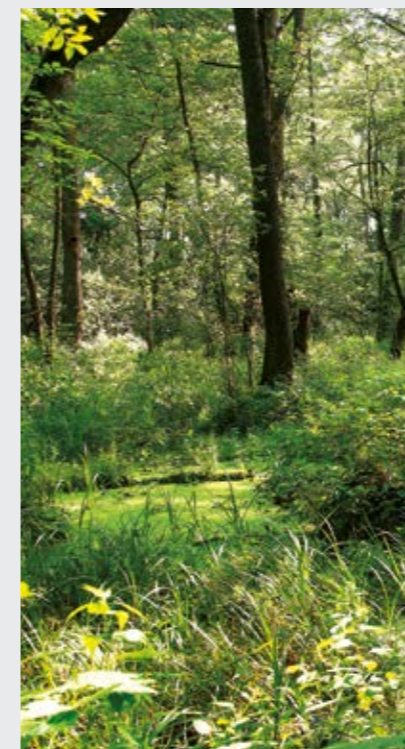
PARKS

A wild corner along the Korabiewka near Prochowy Młynek within Bolimowski LP (Radziwiłłów FD).

Protection of naturally-valuable areas and objects is by virtue of an Ordinance of the Minister, or Regional Director of Environmental Protection; or else by Resolution of a Regional Assembly or Local Council. All of these organs are obliged to care for protected areas and objects.

Monuments of Nature (411 trees, avenues of trees, sites for plants, glacial erratics and geological sites). The Forest Districts as managers of this land take care of it, even though no actual obligation of this kind is imposed by the Act.

A third level of activity involves the protection of areas or objects of exceptional natural value pursued on the basis of internal Ordinances from the forest authorities. Our RDSF has designated 17,377 ha of forest as of high natural value, and 12,015 ha as so-called "reference areas". 1177 ha has been left for natural succession to take its course. Finally, above and beyond any official order, foresters extend their care to trees that are old or have unique shapes and forms, as well as to sites for rare plants and animals. At that level, the attitude reflects compelling inner need and a sense of mission – above all to ensure that future generations might also enjoy and benefit from everything in forests that is unusual, rare or special.



NATURE-AND-LANDSCAPE

COMPLEXES

Zwierzaniec Królewski (572.3 ha) – formerly the estate of Bishops, Kings and Tsars, now a suburban forest with ancient oaks. Also featuring the Skierniewice Forest Inspectorate.



AREAS

OF ECOLOGICAL UTILITY

Extensive regenerating forest peatlands with sedges, in the Piskorzaniec Sub-District of Przedbórz Forest District.



MONUMENTS

OF NATURE

An oak growing out in the open near Taras in Grobla Sub-District of Przedbórz FD. It has a fine crown and a trunk of girth 5.8 metres!



PRECIOUS STANDS

Romuald Olaczek

The public have a justified expectation that foresters and the State Forests Forest Holding will be advocates and agents for the protection of forest nature wherever this arouses people's interest or admiration.

Half of the Nature Reserves within the area of Łódź RDSF appeared because a forester here pressed for that. Attention has been paid to stand age and naturalness, species diversity, rarity of occurrence and location. Conservation extends to patches of forests of special ecological, scientific, historical or aesthetic value. The first stage in establishment is exclusion from economic utilisation, as followed by various conservation measures taken.



YEW, LARCH AND LIME

These trees disappeared from our forests on account of the management methods applied formerly. By the mid-19th century, they had already become rarities. Their return to the forest began with the extension of Reserve protection to the few places in which these trees still lingered on, as at Jasień (in the case of the yew), Trębaczew (Polish larch) and Babsk and Meszcze (small-leaved lime). The next step was to steadily reintroduce these species into managed stands, often by taking advantage of the seed resources still present in the Reserves. Today, lime and larch are already back as stand components, while yew is gradually reassuming that kind of role.



PROTECTION

Even forest trees have a lifespan limited by deterioration in health and wood-quality with age, as well as an increasingly impaired ability to take up carbon dioxide. On the other hand, old trees forever evoke admiration and respect in people. So in our forests we may come across specimens that may even be several hundred years old. Equally, virtually all the stands in Poland more than 160 years old now enjoy Reserve protection – in our case at the Dęby w Meszczach, Gaik, Starodrzew Lubochniański and Spała sites. It is always a great experience to encounter ancient trees, mostly also with their sets of birds in residence.



FIR AND BEECH

Central Poland is actually the area through which run the natural range limits in Europe of both of the above species. The anyway-limited beechwoods in this part of Poland were very much depleted as industry developed; while air pollution further weakened fir trees. For years now, foresters have been facilitating the spread back through forest of both species. In turn, places of their natural occurrence have been protected in several tens of dedicated Reserves that will continue to make it clear where original ranges were. The Reserves may also serve as a source of seed. Examples of fine beeches in our region can be seen at the Gałków, Parowy Janinowskie, Wiączyń, Paza and Bukowa Góra Reserves. In turn, fir woods are protected at the Łaznów, Kobile Wielkie, Jamno and Łuszczanowice Reserves.



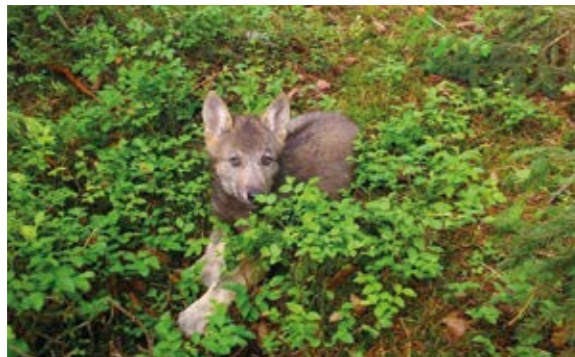


THE RETURN OF THE WOLF

Maciej Siembor

Wolves disappeared from central Poland in the 19th century, as wild forests here were eliminated to meet the needs of industry... and in the absence of planned management. Of course, wolves were also persecuted as threatening livestock and people. Not long ago it had seemed that the absence of this species would never be rectified...

But for 10–20 years now, wolf populations in Poland have been increasing dynamically. By the early 21st century, the main links were with the Bieszczady and Eastern Beskid Mountains, as well as Białowieża Forest. Various sources suggested that there might be 500–1000 animals, and even that was a far more favourable situation than in the 1970s (when there had been less than 100). But today, wolves are present across Poland! The central part of the country was still for long a white patch on the range map, as there are few larger forests here, in which wolves might live, hunt and breed at liberty. But in the end they appeared nonetheless, mainly along the ecological corridors represented by forests growing along the valleys of the Pilica, Warta and Rawka.



First, still-dubious references to the presence of wolves (single individuals or tracks) only appeared a couple of years ago. They indeed tended to be doubted, or were kept quiet to avoid unnecessary fuss. But with time the evidence mounted, with a pair seen here, a chewed red deer or wild boar found there; and then undoubted proof – freeing of trapped specimens, fatal collisions with cars, phototrapping, and pictures of cubs. Careful fieldwork-based analysis suggests that our Łódź forests currently sustain at least three steady packs – which also give rise to individuals leaving their families behind and wandering in search of new territory. This means that perhaps 25–30 wolves appear here regularly.



IF WE MEET A WOLF IN THE FOREST...

- we should above all remain calm: wolves avoid people, and never come close to us unprovoked;
- (seeing it, without it seeing us), we can clap, shout, whistle or break a branch, and the animal will certainly escape;
- we do not throw anything or give chase, as there will be a problem if this turns out to be a dog gone wild – that is a more unpredictable beast, even as it does allow for a closer approach;
- (in its lair), then we do not approach – especially if the sounds of cubs can be heard: they do not need our help, but we do need to retreat from the area making it seem that we have noticed nothing, and so reducing the likelihood that adults noting our presence – and most concerned for the safety of their offspring – will risk an attack;
- (and it is eating), we should not risk an approach, in the (false) belief that the animal is too busy to notice, and it would make such a great photo...;
- all will be well, as long as we humans do not behave stupidly longer-term, by encouraging a change of wolves' lifestyles or behaviours – so we do not offer them food in any circumstances, do not allow them to learn that they might get some tasty morsels easily, without having to put in any work;
- we do not try to tame it: efforts over time to make closer and closer approaches, and to habituate or "make friends with" wolves are the height of irresponsibility; these are wild animals and, while we might admire them or fear them, we should first and foremost respect the independence of their existence.





BLACK STORKS ONLINE

Piotr Zieliński

The black stork is a very rare and rather shy inhabitant of Polish forests. Our educational project *Bociany czarne online* is helping people become more aware of the secret life of this species.



Written by nature, the script of our serial featuring black storks is different each year.



We know the nesting habits and behaviours of black storks thanks to the hidden camera.



A large and firmly-mounted nest offers the young birds a safe space in which to grow up.

A NEST IN THE OBJECTIVE

This Project has been a joint undertaking of the Łódź Regional Directorate and the Faculty of Biology and Environmental Protection of the University of Łódź. The Eagle Protection Committee also played its part in the years 2016 and 2017. Since 2016, we (and many other interested people online) have been following the fate of black storks at two nests, one in an oak and one in a pine. We were able to observe the fly-ins to the nest of the first and then second members of the pair, fights between males over the nest, courtship, the laying and incubation of eggs, attacks mounted on young by a goshawk, the feeding of nestlings, and their first attempts to

stand; and later the flapping of wings and first flights, and then the more-definitive departure from the nest.

In 2016, a goshawk took all the nestlings from the nest on the oak, while the one on the pine was successfully left by two birds known as Starszy and Młodszy. In 2017, the pair in the nest on the pine split at the laying stage, while the nest in the oak fledged Woodek and Malwin. Woodek had heroically defended himself and his brother from a goshawk attack. In 2018, the nest in the pine was merely visited by two storks, even as the one in the oak yielded as many as four fledged young, including Lodka. In 2019, the pine nest only attracted one stork, while – despite “goshawk pressure”



The male reaches the nest first, followed by the female several days to several weeks later.



Black stork nestlings remain in the nest for not quite 3 months.



ZONE DESIGNATION AROUND NESTS MEANS YEAR-ROUND PROTECTION OUT TO 200M IN EACH DIRECTION FROM THE SITE, WITH AN EXTENSION TO A RADIUS OF 500M THROUGH THE WHOLE PERIOD FROM MARCH 15TH TO AUGUST 31ST.



- our region's two most-productive nests of black storks respectively raised 39 birds over 14 seasons, and 34 over 11.
- the biggest tree in which black storks have been seen to nest is a pedunculate oak of breast-height diameter 160 cm and girth 502 cm! The actual nest is situated 16.5 m above the ground.
- the loftiest nest of this species is 19.5 metres above the ground, while none are elevated by less than 6.2 metres.

Across the Łódź RDSF, 56% of black-stork nests are in oaks. Though the Scots pine is a ubiquitous tree, it only accounts for 33% of nest-sites. Pairs that enjoy breeding success raise 2.7 young annually on average.

– three young birds called Patyk, Skoczek and Gwalbert did fly from the oak nest.

Prior to their leaving the nest, certain young storks were fitted out for solar-powered GPS tracking. The small devices do not impede the birds, and allow their movements to be traced. In 2020, we are continuing with online broadcasts from a black-stork nest in the Łódź forests. The fates of the young can therefore be followed at <https://www.facebook.com/LasyPanstwoweLodz/>.

ABOUT BLACK STORKS

Black storks breed across a large area of Europe, where forest is present. An isolated population is also present in southern Africa. Mature broadleaved stands in wetland areas are the favoured habitat, while nesting is in giant specimen trees, usually high by the trunk in the central part of the crown.

Though present in almost the whole of Poland, the species has larger populations in the east. Today there are an estimated 1400–1600 pairs. That converts to 0.42 pairs per 100 km² of Poland; 1.96 pairs per 100 km² of forest in Poland, and 4.35 pairs per 100 km² of forest more than 60 years old.

In practice, many nests are in Nature Reserves, as it is there that the oldest tree-stands occur, as well as zero disturbance during the breeding season. Key items in the diet are small fish (up to 10 g in weight, so often weatherfish or small carp) and amphibians (particularly the tadpoles of spadefoot toads). Frogs, fire-bellied toads, newts and aquatic invertebrates are also eaten – by the up to 5 babies forming a single brood.

Europe's black storks winter in sub-Saharan Africa, with most Polish birds taking the eastern migration route via Istanbul, the Middle East and the Sinai. Nevertheless, some birds in western Poland make the alternative choice, heading for Iberia and crossing the Straits of Gibraltar into Africa.

FOREST HOSPITALS

Paweł Kowalski and Jerzy Downarowicz



Wild animals in need of human help find their way to rehabilitation centres, of which some are run by foresters themselves – helpful, given their extensive knowledge of wild species, their habits and needs. The State Forests funds the necessary animal treatment and rehabilitation. Our Directorate in fact has two such forest centres – in the Forest Districts of Płock and Piotrków.

Typical arrivals at our Rehabilitation Centres are young animals, or ones that have been in collisions. Species turning up most often are white and black storks, buzzards, goshawks and swans, as well as beech martens, hares, foxes, roe and red deer. But then there are also white-tailed eagles (!), kestrels, long-eared owls, barn and tawny owls, and red squirrels, hedgehogs, swifts, tits, moose, ravens and sparrowhawks. In a typical year we might take in 1000 such creatures, and more than 95% of them are able to go back into the wild! The ones we keep on serve educational functions, as we do more than just coax animals back to sound health. The fitting motto is “no rehabilitation without education”. Each year over 10,000 children and young people come and have their eyes opened about wild animals in the course of such classes.





REHABILITATION CENTRES



Piotrków Forest District has been engaged in nature-and-forest education continually since 1994. Six years into that period, a Forest Educational Settlement was set up at Koło, with this being a place to see – and learn much more about – wild animals. Five years passed, and it was decided to supplement the educational activity through the founding of the Rehabilitation Centre for Wild Animals. Patients arrive here from across the Łódź RDSF, and include both wild animals and pets. And as some of the former may never return to nature, they live on at the Forest Settlement.



Ośrodek Rehabilitacji Zwierząt Leśnych w Miszewie Murowanym

Contact: forester Jerzy Downarowicz, tel. 606 645 015

Our institution was set up on the basis of an agreement entered into in 2000 by Płock Forest District, the City Zoo in Płock, the Płock District Board of the Polish Hunting Association (PZŁ) and the County Veterinarian in Płock. The Centre was called into being to nurse back to health animals harmed on roads, by the activities of poachers, or otherwise because of removal from the forest. Given that Płock Zoo had no conditions to take on such wild animals, it was determined that the Centre would be founded at Miszewo Murowane in Płock FD. And it has now been in operation since 2002. A teaching room and dendrological trail have also been established there, and there are cages with runs for wild boar and roe deer, as well as aviaries for birds. Our centres also care for red and roe deer, moose and boar – about 100 animals a year, of which around a quarter become permanent residents. Additional cages for birds went in in 2018, along with a room in which simple veterinary procedures can be carried out; and new teaching boards.

IN GOOD HANDS

Animals at the Rehabilitation Centre receive all-embracing care. As a result, some are able to return to their forest home.

Ośrodek Rehabilitacji Dzikich Zwierząt w Kole

Contact: Paweł Kowalski, tel. 694 408 878

Founded in 2005 in Proszenie Forest Sub-District, this entirely SF-funded Centre engages in the rehabilitation of both birds and mammals. Enclosures and areas of pasture extend over more than 5 ha here, and almost 600 animals a year receive assistance and veterinary care. Permanent residents are boar, red deer, sheep, goats, horses, foxes, buzzards, storks, gos-

hawks and owls – over 40 animals of different species in total. They live side by side peacefully enough, in some kind of contemporary Noah's Ark...

The Proszenie Centre is now being redeveloped and modernised, with the plan being to furnish it with an operating theatre and recovery room.



APPETITE FOR LIFE

Abandoned by his mother on a wet meadow, Florek owes his life to human intervention.



CURIOSITY

Eagle owl gets to know human being, and its curiosity ends with no parts lost.



A HAPPY FATE

Chmurek became lost in Łódź while a piglet. He is now a star of the Educational Settlement.



REINSTATING THE YEW

Marek Miścierewicz

Yews are long-lived trees, with a 3000-year lifespan quite possible! Poland's oldest yew – growing at Henryków Lubański in Lower Silesia – is around 1250 years old.



YEW

Taxus baccata L.

is a slow-growing species that is hard to cultivate. In its first years it is delicate, and can be browsed to destruction by forest herbivores. In contrast, it becomes extremely resilient later in life, is very longlived indeed, and can grow steadily where conditions are favourable. Poland's oldest known tree is a representative of this species.



A fruiting yew. All parts of the plant, including the scarlet-red aril surrounding the seed, are poisonous

Though termed “common” in Polish, the yew is not so easy to see in its natural habitat. It is only present at a few scattered sites. The species found itself on the list of Endangered Plants in Poland as a reflection of earlier ruthless exploitation for the valuable wood – which is the densest but also springiest of any tree present in Europe. It requires the active involvement of foresters to ensure a continued presence in the habitat. Paradoxically, it was as early as in 1423 that the yew gained protection against plundering, under the Warta Statute issued by King Władysław Jagiełło. The aim was to stop a racket whereby Gdańsk merchants were selling yew-wood to the Teutonic Knights (given that it gained use in weapons manufacture). Further information on the protection of the species appeared in 1827, in relation to Wierzchlas in the Tuchole Forests. Then in 1900, the Prussian authorities confirmed the partially-protected status of the yew at that same Wierzchlas Reserve, only for Polish authorities to follow with Strict Protection in 1920. In the newly-independent Poland, the species had been safeguarded by a 1919 Regulation of

the Minister of Religious Affairs and Public Education, and it was then brought under Species Protection by virtue of a 1946 Regulation. It is now protected by the Nature Conservation Act 2004, as well as a 2014 Regulation of the Minister of the Environment on the species protection of plants. The 2001 Polish Red Book of Plants does list this as an Endangered Species.

From 2006 on, the State Forests commenced with a Programme for the Protection and Reinstatement of the Yew in Poland. While natural sites for the species are lacking in the area managed by the Łódź RDSF (with just a few specimens of non-established origin present), the Directorate began with the Programme in 2016 just the same. The aim is for each Forest District in our region to create a yew plot to enrich local flora and represent a refuge from which the species may prove able to spread. By the end of 2020, the forest land of the Łódź RDSF will have introduced 22,320 saplings, and by 2030 some 60,000. In Poland as a whole, some 180 ha of yew plantations had been established by 2014, while 400,000 saplings had been introduced into the environment.

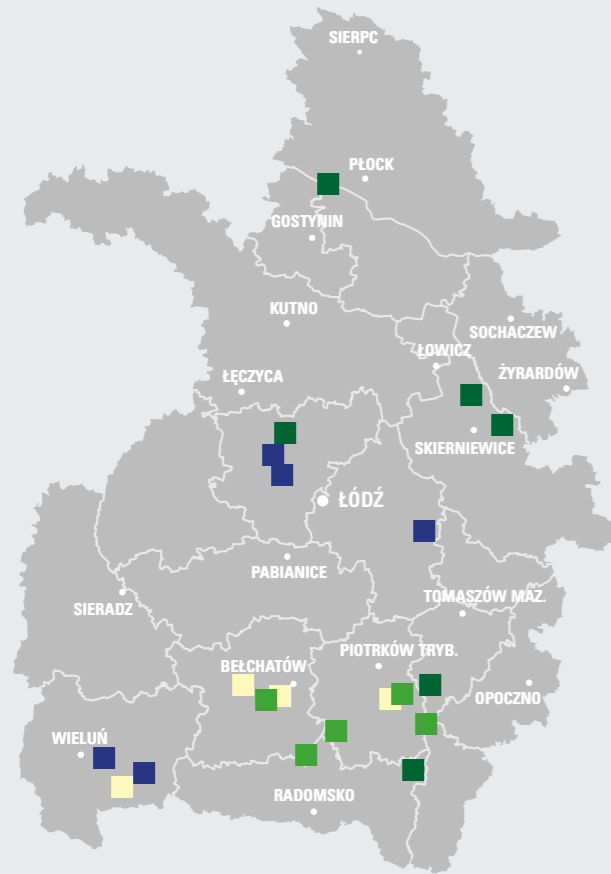


IN POLAND, THE YEW
IS INCLUDED
THE “RED BOOK
OF ENDANGERED PLANTS”



ENDANGERED PLANTS

Maciej Siembor



6 PROTECTION PROGRAMMES

Through cooperation we are saving the most-threatened plant species.



4 SPECIES ALREADY IN THE FOREST

1400 plants planted out in six different FDs in the 2015–2019 period.



2 PROGRAMMES AWAITED

2020 will see us reintroduce the Eastern pasqueflower and sand pink.

PLACES OF OCCURRENCE WITHIN ŁÓDŹ RDSF

- ladybells
- grass-leaved sandwort
- Cheddar pink
- twinflower

There are very many forest species among the 100 the Red Book of Plants for Łódź Voivodeship lists as most endangered. Botanists from Łódź University and the city's Botanical Garden – who authored the Book – have also founded conservation programmes for some of the plants. In cooperation with the State Forests, they are pursuing a programme of protection for the grass-leaved sandwort, Cheddar pink, ladybells and twinflower. Also in the pipeline, efforts to protect the Eastern pasqueflower and sand pink.

REGIONAL CONSERVATION PROGRAMMES FOR SELECTED RARE AND ENDANGERED PLANT SPECIES ACROSS ŁÓDŹ VOIVODESHIP.

THE EASTERN PASQUEFLOWER IS ONE OF 5 *PULSATILLA* SPECIES IN POLAND. ALL ARE IN NEED OF ACTIVE PROTECTION MEASURES.





GRASS-LEAVED SANDWORT

While not appearing on the list of protected species, this plant is Critically Endangered (status CR). Recently, the only known Polish sites have been in the *Puszcza Augustowska* forest complex, as well as the area of the Łódź RDSF – not far from Kamieńsk, near the boundary between Bełchatów and Piotrków Forest Districts; as well as near Młodzieszyn in Radziwiłłów FD.

This sandwort is a small, unassuming plant of poor sandy soils, growing in sunny spots where there are clearings with a sparse grassland, or else in open pine forest. In 2015, seven metaplantations (new sites) for the species were founded, i.e. three and four respectively in Bełchatów and Piotrków FDs. The planted-out specimens were grown at the Botanical Garden – from material collected at the site near Kamieńsk.



ŁÓDŹ BOTANICAL GARDEN

ul. Krzemieniecka 36/38

It is here that material taken from the field is used to grow into seedlings and young plants for planting out at selected sites.



LADYBELLS

Perhaps the prettiest of the rescued species, this remains Critically Endangered in Poland, and is indeed a priority in Europe as a whole, gaining special *Natura 2000* protection. In our area there are just 5 sites for it, two each in Grotniki and Wieluń FDs and one in the District of Brzeziny.

Ladybells is a plant mainly remaining in sparse, well-lit oak woodland. Once, the shrubs and over-luxuriant ground vegetation in such areas were kept down by livestock grazing, forest-litter collection and the gathering of branches for fuel. But such activity has ceased, and the non-natural oak woodland of this kind is disappearing as a result. Intervention to maintain it requires the cutting of most shrubs, and even the removal of certain trees. In 2018, the sites in the Wieluń and Brzeziny FDs received a total of 185 young plants grown at the Botanical Garden.

Will it prove possible to save remaining sites? In this case, a principle adhered to is that new plants go in to the same sites from which seeds came, and that represents a problem, as not all parent plants achieve flowering annually, so seed is not always present, or else is eaten by animals. Inventorying carried out in 2016 and 2017 showed that Łódź sites support just 9 (!) single individuals or clumps present naturally.



CHEDDAR PINK

Cheddar pink is Endangered in Poland, while facing critical endangerment in the central part of the country. In the 20th century, it was present at 10 sites around the Łódź region, but today it remains at just 5 – two in Bełchatów FD and one each in the Districts of Piotrków, Wieluń and Smardzewice. Stem cuttings were taken from some of these plants for propagation at the Botanical Garden; and the young plants generated in this way reinforced local populations – in 2015 in Bełchatów FD and in 2019 in Piotrków and Wieluń.

This carnation-relative likes weakly-developed sand-and-gravel soils, growing in sparse thermophilous grassland in dry and sunny places. In central Poland it is a plant of pine forests with loose stands. Successful conservation depends on preventing the development of weeds and removing the understorey – meaning steady, ongoing work for foresters.



Where Endangered and rare species come under conservatorial protection (i.e. with no action taken at the places where they occur), there is no guarantee they will remain in the habitat. This is particularly true of plants that are in some way sensitive or intolerant, which is usually to say characterised by specific habitat requirements. Some of these will disappear without trace if quite natural processes (like the development of undergrowth or shade) take place. In addition, plants delicate in this way are under steady pressure from expansive species, needing to fight for light and space in order to germinate.



TWINFLOWER

This creeping dwarf shrub is a postglacial relict present at the absolute southern end of its range. While the populations in Pomerania, Mazury and Podlasie are stable, this species has the status of Vulnerable in Łódź voivodeship. Our RDSF includes 6 sites for it, of which two are in Skierniewice FD and one each in the Districts of Smardzewice, Radomsko, Grotniki and Plock,

Mainly present in more nutrient-poor mesic pine forests, it prefers places where the microclimate is cooler, the reason being that this helps limit the growth of tall shrubs. 2019 saw three metaplantations for this species established – close to locations where it had once been present in Skierniewice and Radomsko Forest Districts. The material for planting was propagated at the Botanical Garden.

based on the RBPLV



THE FOREST FOR PEOPLE

Arkadiusz Karbowski

For centuries, we have taken advantage of the bounty the forest has to offer, not always realising how valuable it is, and how very varied are the functions that forests serve.



"NATURE IS FULL OF INFINITE CAUSES THAT HAVE NEVER OCCURRED IN EXPERIENCE"
- LEONARDO DA VINCI.

What the forest has to offer besides timber is known in forestry by the term by-products. There is a huge wealth and diversity of these, including resin, bark, fruits of the forest, herbs and other plants (including decorative), fungi, game animals and products derived from them, snails and products from bees, and such mineral resources as peat, sand and gravel, minerals and amber.



UNDERAPPRECIATED WEALTH

Fungi including chagas, mushrooms and oyster mushrooms are quite clearly shown to be effective medicinally, but only rarely used.



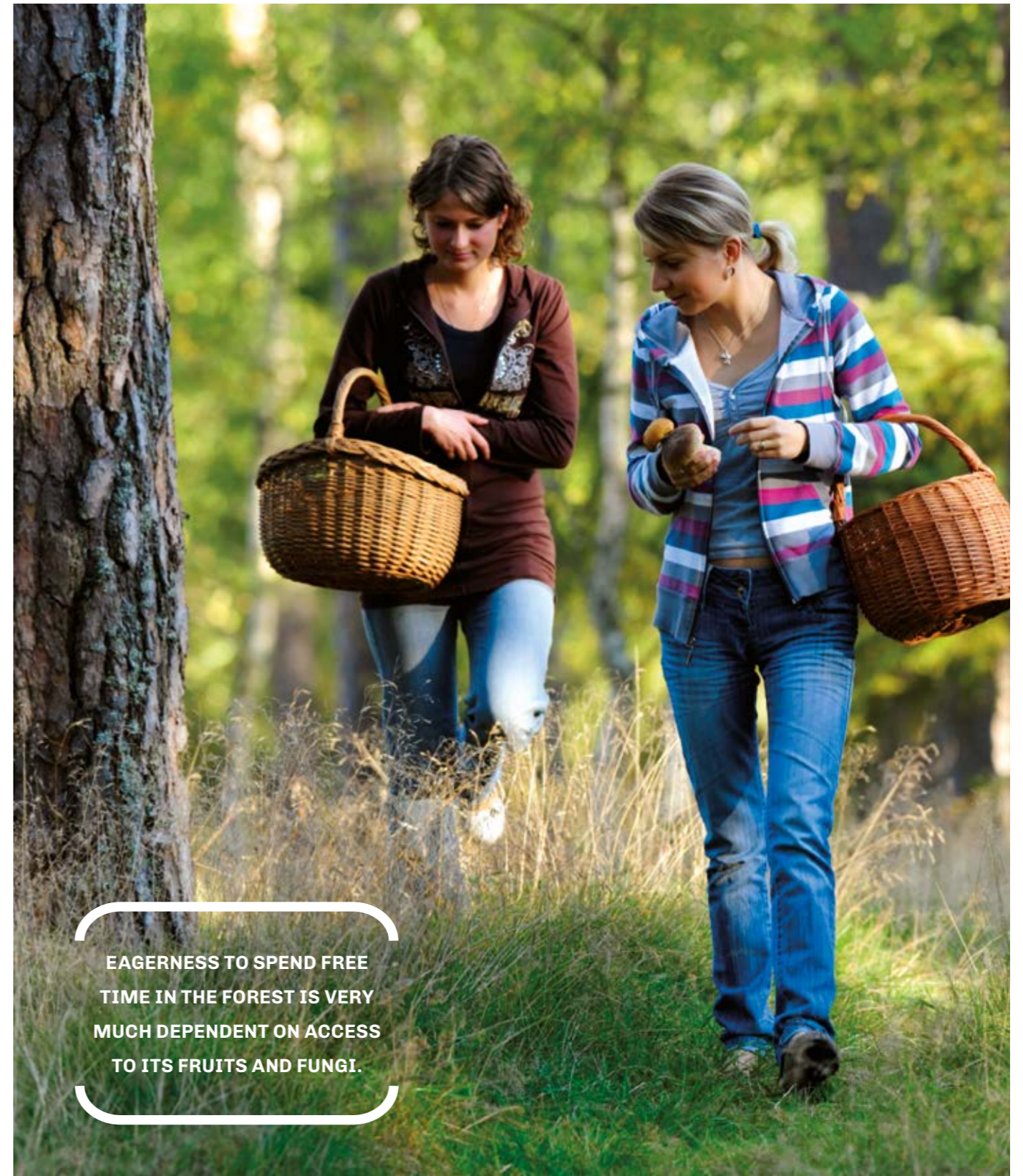
A RETURN TO TRADITION

Making a comeback on shop shelves are such traditional products as birch juice and derivatives thereof, acorn "coffee" or flour, and juniper and acorn beers.



PROFITABLE BY-PRODUCTS

It is estimated that the total value of fungi, fruit, herbs and wild game harvested in forests reaches almost 25% of the value of the wood the State Forests sells each year.



EAGERNESS TO SPEND FREE
TIME IN THE FOREST IS VERY
MUCH DEPENDENT ON ACCESS
TO ITS FRUITS AND FUNGI.

Today, the non-timber forest by-products of greatest significance are resources from the forest floor, above all fungi and fruits of the forest, and to a lesser extent also medicinal plants.

Historically, the forest offered dyestuffs and potash used in making cosmetics, while providing a base for iron-smelting and the brewing of beer, and the manufacture of tars used in sealing and medicinally, or in cosmetics.



FUNGI

While mushroom-picking is a rather spontaneous activity, the various fungi involved represent a good of measurable value. In 2013, Andrzej Grzywacz calculated that people in Poland each year collected specimens to a value of 740M zł. 30% goes for purchase and export, 10% is sold by the roadside or at bazaars, and 60% serves people's own needs.

Alongside the well-known ground-dwelling species, bracket fungi are also used widely (as drawing sponges or additives to tobacco when ground up), together with maze-gill fungus (as curry-combs) and birch polypore (for fishing lures).



FRUITS OF THE FOREST

Everyone knows the unique flavour and scent of cowberries, raspberries or wild strawberries growing in the forest. These have always had their aficionados. Recently, however, environmental and "back to our roots" movements have made popular the collection of juniper berries, and the fruits of blackthorn (sloes) and buckthorn. Products long-forgotten now making a reappearance in shops include acorn coffee (as drunk by Chopin). That tastes very good, has a distinct aroma, and represents an energising and immunity-enhancing beverage. Unlike coffee-bean coffee, it supplies magnesium, and is also easy on the stomach.



MEDICINAL PLANTS

Herbal and folk medicine makes use of several hundred species of forest plant! These include both species inhabiting the forest floor like lily-of-the-valley, bilberry, bearberry and cowslip; and trees and shrubs such as silver birch, pedunculate and sessile oaks, small-leaved lime, rowan, elder, guelder-rose, juniper and alder-buckthorn. Thankfully, we can all feel reassured as regards the quality of the material available to be collected in most areas of forest in Poland, which are far from sources of pollution and only rarely sprayed with any chemical protection agents.



RESIN

Between the 1950s and 1970s, a key forest by-product in Poland was resin from Scots pine trees – of which the peak annual production reached 23,000 tonnes! From the 1980s, domestic output declined steadily as its place was taken by imports – above all from the Republics of Belarus and Ukraine and the People's Republic of China.

Resin has a surprising number of uses – in the pharmaceuticals industry and the production of paints and lacquers, and in the manufacture of underwater and other electrical cables, as well as cosmetics and plastics.



HONEY

As honeybees return to forests, we may delight in the exquisite taste (and special medicinal properties) of honey from hives placed among the trees.

This kind of beekeeping went out at the end of the 19th century, but the efforts of foresters of the Spała, Piotrków and Złoczew FDs have brought it back. Forest bees not only make honey, but also pollinate plants. And hives in a forest are a tourist attraction.

As beekeepers work at hives, they need to encourage docility in the inhabitants, achieving this by using a product made from the pressed fruiting bodies of tree fungi!



SAPLINGS AND CHRISTMAS TREES

Around Christmas time, the Forest Districts engage in the sale of Christmas trees. The small, scented tree is a traditional home decoration. Then as spring comes, the forest nurseries offer seedlings and saplings of trees and shrubs, as well as expert advice on how to grow and look after them. At present, the Łódź RDSF has 184 ha of nurseries each year producing almost 30M young coniferous and broadleaved trees of different ages and sizes. These provide a basis for Łódź foresters' annual efforts aimed at regeneration and reafforestation over an area of approximately 2500 ha.



WOOD FROM ŁÓDŹ FORESTS

Dariusz Jankowski

People have made use of wood since the dawn of time – as a source of heat and a building material above all. This is the universal raw material – easy to work, and durable.



With civilisational progress, there was a steady increase in the significance of wood and scale of its use. For wood is fully renewable, can be processed many times, and at no point does its working or natural decomposition generate any kind of harmful waste. Thanks to wood, Poland has many still-developing branches of industry – in processing at sawmills, cellulose, board-making and so on. Wood also heats the dwellings people live in. Economic growth is associated with increased demand for wood, and in Poland over 3 decades annual consumption almost trebled to the equivalent of 1.1m³ of the raw material per person. Łódź RDSF supplies 4% of the wood utilised in Poland, with about 85% of the wood sold by Forest Districts here passing to enterprises. The remainder (mainly in the form of fuelwood) goes on to the retail market.

FELLING REPRESENTS THE START OF A NEW LIFE FOR WOOD – THE WORLD'S MOST NATURAL, FRIENDLY AND UTILISED RAW MATERIAL.

The unit of measurement of timber is the cubic metre (m³). This is the volume of wood (minus bark and empty space) that would tightly pack a cube of sides 1 metre in length.

15%
of wood goes on
to the retail
market

85%
of wood
goes
to enterprises



UTILISATION

This is the branch of forestry whose methods seek to harvest and make optimal use of wood in a forest, in line with species, quality and dimensions.



MATURITY

A stand is mature when trees tend to stop growing upwards, while increments in girth also tail off. However, slow natural processes of dieoff have not yet begun.



PLANNED FELLING

Harvesting of timber always complies with the forest management plan. Trees are removed at one go, or in stages. And new forest is planted in a felling area within 5 years.



PINE

Takes the lion's share of our Łódź market for wood – about 77%. Though this is a rather soft and light wood, it is simultaneously very durable. The large-dimension assortment is used mainly in building and furniture-making. Modern technologies of gluing allow for made-to-measure production of elements made from wood, and for a very even and homogeneous structure. Middle-sized cuts are used to make cellulose, paper and wood-based panels. Pine of the best quality grows in the Forest Sub-Districts of Smardzewice, Piotrków and Spała.



BIRCH

Second-placed on the market with an 8% share, this wood has very considerable mechanical durability. Veneers are made from it, plywood (including in aviation) and furniture. Wood cuts of average dimensions are used in the production of cellulose or wood-based panels, while that of the worst quality serves as fuel. Birches grow rapidly, and they are not fussy, so can grow on poorer soil. As a pioneer species naturally, they reach new sites opened up by wind, fire, snow or pest outbreaks, thanks to their small and light wind-borne seeds.



OAK

7% of the wood on offer is oak, which is quite hard and resistant. The highest-quality raw material goes to make veneers, furniture, parquet floors, stairs, windows and doors. Where wood is of lesser quality, it is turned into wood-based boards or fuelwood. Qualitatively the best stands with oak trees are in the Forest Districts of Kutno, Kolumna, Łąck, Piotrków, Grotniki and Skierniewice. Each year a small amount (some 300 m³) of the best oak is allocated for sale by tender. The average cost per cubic metre is then 2000 zł.



ALDER

Alder takes a 3% share on the Łódź market. Large-dimension timber is used to produce veneers, plywood and fibreboard; while medium-dimension timber ends up in wood-based panels.

OTHER

The share accounted for by the remaining species of tree – such as spruce, larch, beech, hornbeam, aspen and ash – is less than 1%. They nevertheless represent a key element enriching the Łódź forests.



REGENERATION

In the context of stand regeneration and the reforestation of waste ground, Łódź foresters plant around 18 million trees each year. That is 70,000 saplings on average each working day!



GROWTH

In the years 2014–18, the mean annual increment of standing timber in the Łódź RDSF was of 2.275M m³ (or 8.05m³ per ha). Thanks to this increasing stock, it is possible to increase the supply of wood without risking the persistence of forest in any way.



HARVEST

The annual harvest of all wood in the Łódź RDSF is at a level of 1.595M m³. That is around 70% of the increment in timber achieved annually, on average. More and more often, harvesting is an activity for multi-purpose machines.



SALE

Sales of wood are currently achieved mainly via the placing of offers online (on the *Leśno-Drzewny* Portal) or by electronic auction in the *e-drewno* system.



RAW TIMBER PREPARED
IN WINTER IS OF LOW HUMIDITY,
SO IT IS NATURALLY
SAFEGUARDED FROM ATTACK
BY SAPROPHYTIC FUNGI.



ON PINES WE STAND

Sylwester Lisek

Who does not know it? Proud and straight or conversely low and twisted, or even curved, sabre-like. Called the Queen of Poland's forests, hail the Scots pine *Pinus sylvestris*!



It is to be seen everywhere, as we travel through Wielkopolska, Mazowsze, Silesia and Pomerania. It grows in the Słowiński dunes, helping hold them in check; and on mountain slopes – where a safeguard against erosion is offered. It is also widespread in the Łódź region, where together with larch it dominates over 83.5% of the area of state-owned forests. The Scots pine forms a monoculture over extensive areas, and there all the trees are of similar age. What are the consequences? When one tree weakens, a bridgehead for attacks on other, still-healthy specimens is established. Weakened trees are vulnerable to pest insects and fungi, and are then unable to withstand droughts or floods. They fail to protect from wind, and in large numbers favour the rapid spread of fire.

A MONOCULTURE OF PINE

Uniform, monotonous forests of pine reflect artificial stand regeneration. First, deforestation followed the increased demand for timber, only increased by the 17th-century onset of the Industrial Revolution. The response was mass planting of Scots pine, which performs well on both infertile and richer soils. However, the effects of single-species cultivation on the environment are negative.

A FIRST, PIONEERING, DOMINANT SPECIES USED
IN FOLK MEDICINE AND HERBALISM IN THE FORM
OF DECOCTIONS, TINCTURES AND SYRUPS.



It is in the *Puszcza Pilicka* (or *Spała* Forests) area of our Directorate that we find the strong ecotype known as the *Spała* pine. Tall, straight, towering and mastlike, it is found from Brzeziny FD in the north, down through *Spała*, *Smardzewice*, *Opoczno* and *Bełchatów* to *Przedbórz* FD in the south. The range of this pine is nevertheless shrinking, partly on account of diversification with broadleaved trees. Oak, beech and fir are being brought in where site types are more fertile, the aim being to generate a forest more resistant to unfavourable atmospheric conditions, wind and protracted droughts. Variability of structure in forest should leave it more resistant to climate change, but the remodelling work may even take several decades. In the meantime, we will continue to invite you into forests that are very much made up of pine trees.



THE SPAŁA PINE

The *Spała* pine is a so-called ecotype standing out with its flat bark, straight trunk (at most somewhat twisted at the top) and crown only spreading far above the ground. It grows to even 35 m, as a true queen of the forest!



HUNTING

Beata Lewandowska

Since the very earliest days, hunting has helped ensure people's survival. Today it is also an element in the protection of the natural environment.



FOREST DISTRICTS RUNNING GAME BREEDING CENTRES ORGANISE HUNTS FOR POLISH AND FOREIGN HUNTERS, VIA NATIONAL HUNTING OFFICES.

Rational management of wildlife and game allows for the maintenance of populations at optimal levels. Such activity is extremely important on account of the need for numbers of herbivores to be regulated, given the way that favourable living conditions can encourage exceptional increases in numbers. Such population explosions are always reflected in increased harm done to both forests and agriculture, as well as a far greater number of collisions on roads.

So game management is not just about hunting, but also about long-term care being taken of the hunting grounds. One example might be the Kutno Forest District programme "Enhancing the natural diversity of forest and field hunting grounds", of which a key aim is to reinforce populations of the grey partridge.

Numbering no fewer than 384, the Hunting Districts in areas administered by the Łódź RDSF cover more than 2M ha. Nine Districts over 86,584 ha are managed solely by the State Forests. There are 8 game breeding centres run by the FDs of Brzeziny, Kolumna, Kutno, Poddębice, Przebórz, Smardzewice, Spała and Wieluń.

In Poddębice FD there is a 40-hectare enclosure for the breeding of fallow deer which has been in operation since 2004. The deer are transferred to the SF game breeding centres and to hunting clubs, with the aim being to enrich the gene pool of the local populations.

HUNTING AND CONSERVATION



Our Directorate's Hunting Districts are rich in both large game (red, roe and fallow deer, wild boar and moose), and small (hares, rabbits, pheasants, partridges, badgers and many other species).



1000
INSTALLATIONS
assisting with game management

86,000
HECTARES
of Hunting Districts administered by our Forest Districts.

2000
PARTRIDGES AND PHEASANTS
released on to our hunting grounds over the last three hunting seasons.

"POKOT" IS THE CEREMONIAL LAYING-OUT OF HUNTED GAME SO THAT RESPECTS MAY BE PAID TO ANIMALS WHOSE LIVES HAVE BEEN TAKEN.



THE SPAŁA HUNTING GROUNDS FAMOUS FOR CENTURIES



INDIVIDUAL OR GROUP HUNTING

Those who go hunting on their own may better observe nature and game, but do need an intimate knowledge of the area they find themselves in. A group hunt is in turn a chance to meet with pals, exchange information and revise the ways model events of this kind should be run, in accordance with all the key hunting traditions and customs.

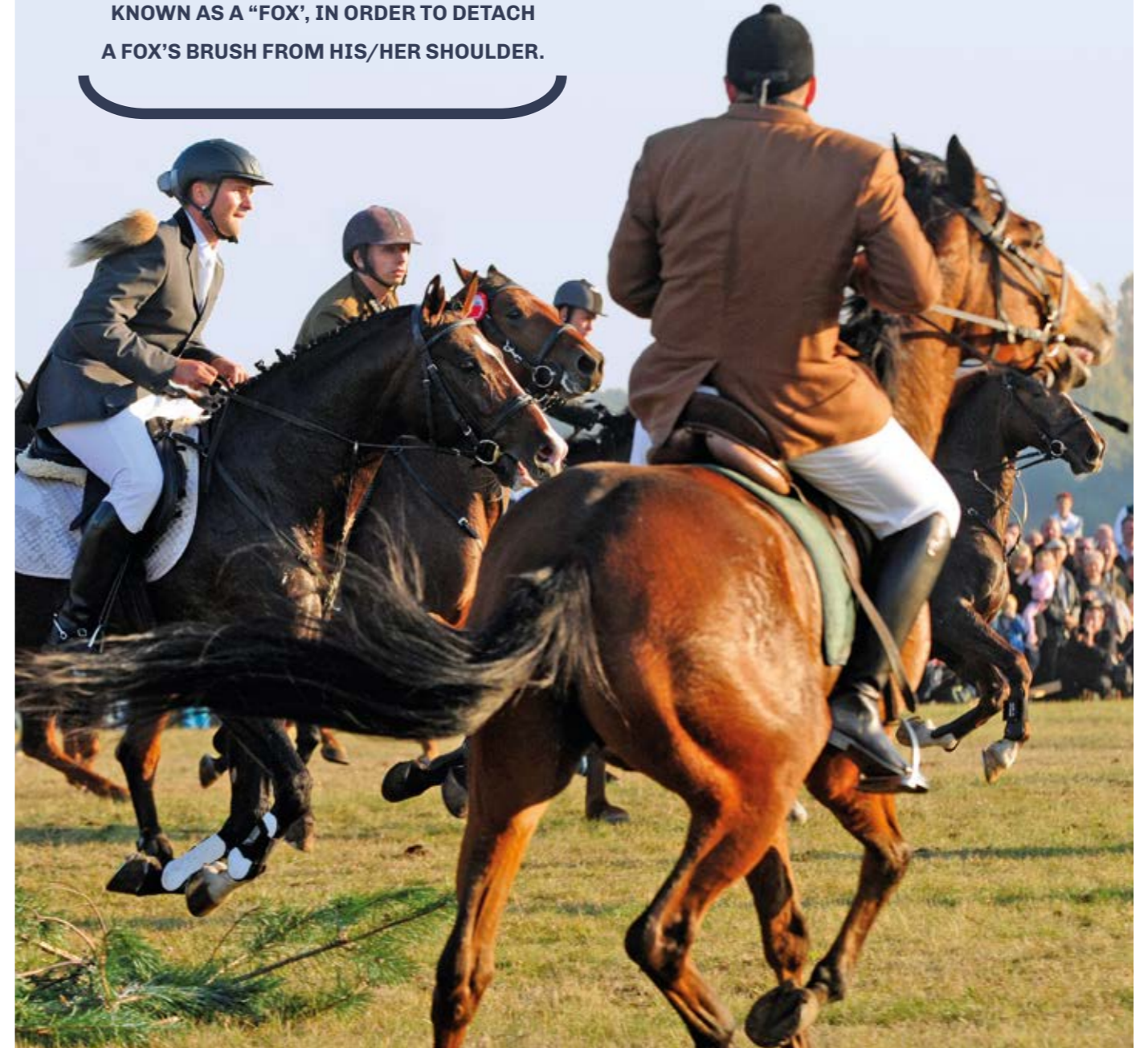
Among the Łódź RDSF's game breeding centres, the best known – both at home and abroad – is that run by Spała FD.

The hunting here became renowned under Tsar Alexander III, who ordered a palatial hunting lodge to be constructed for him in Spała, having become captivated by the beautiful, diverse landscape by the Pilica. Nicholas II inherited a love of the area, made over the residence and then spent holidays here with his family. While the game population was impressive, all the extra breeding meant harm done to both the forest and local crops. Whole villages had to be relocated. The forest complex here known as *Puszcza Pilicka* came to harm during World War I. Game fell to soldiers' bullets and the imperial residence was in part destroyed.

In the inter-War years, Spała in part returned to its former glory. The residence and adjacent forest was designated to serve representative functions from 1922 onwards, and the following year it began to meet the President of Poland's recreational needs. Stanisław Wojciechowski often hosted Władysław Grabowski and Władysław Sikorski here, while Ignacy Mościcki saw to it that game populations were rebuilt. Hunts were organised for members of government, MPs and other worthies; and there were then elaborate November 3rd celebrations of the feast of St. Hubert – as patron saint of hunters.

In 1945, the Presidential residence succumbed to the flames, only being rebuilt – and redesignated as a rest centre – in the 1950s. The autumnal Spała tradition of marking St. Hubert's Day was revived in 2000. This is now a two-day gathering of hunters and friends of the pastime from across Poland. Indeed, it is not unknown for foreign guests to come and absorb the special atmosphere of group hunts run with all the traditions observed. Day 1 features a field mass in honour of the Saint. Later, hunters go off in some 10–20 groups, some in pursuit of small game and others large. The tradition then sees the hunt followed with a parade along the streets of Spała. Parties carrying flags and banners lead the way, and there are riders and carriages and others on foot, who all head off for the ceremonial layout of animals taken, to which homage is paid. Medals for the King of the Hunt and others are awarded. The second day of *Hubertus Spalski* sees riders and birds involved. The party decamps from the town to meadows by the Pilica where "pursuit of a fox" is engaged in, riding is on display and carriages and carts are presented. The fox chased on horseback is not a real one (even though the original hunting tradition is honoured in this way), but a person with a fox-tail attached to their shoulders. The winner of this contest – the fastest and most agile – will be back in the role of the fox the following year.

THE GOAL OF THIS KIND OF CHASE OR PURSUIT IS TO CATCH UP WITH A RIDER KNOWN AS A "FOX", IN ORDER TO DETACH A FOX'S BRUSH FROM HIS/HER SHOULDER.





HUNTING GROUNDS TO PLATE

Katarzyna Lewańska-Tukaj

Meat from wild animals continues to be underrated, even as it becomes more and more readily available. It can be brought at markets and in health food stores. Dishes prepared with it are pleasure itself, and – contrary to popular opinion – are not always especially time-consuming.

The meat of wild animals is something superb to offer for both dinner at home and a party, as nothing evokes admiration in a guest like roast boar or pheasant broth. To be dismissed as fairy tales are stories that the meat is stringy, smells of wind or has to be cooked for hours. Rather, by consuming more of this we diversify our menu and – most importantly – care for our health. Game animals do not experience the same stress as their raised counterparts, are not exposed to uncom-

fortable transport or fear of being slaughtered; and a single shot delivered by an expert hunter means that the meat is spared any flood of adrenaline. From the nutritional point of view, game meat has no equal. The fat content is low (boar on 0.4–17.7 g per 100 g, pork on 10.7–67.8), the protein content high (pheasant 21.8–25.4 g per 100g compared with chicken on 10.7–21.5), as is the level of iron (boar 3.07–3.34 mg per 100 g compared with pork on 0.7–1.3), as well as vitamins and minerals.



A key principle among those preparing hunter's bigos is that it deserves the best. There is no room here for leftovers.



To bring out the true flavour and aroma of this meat, we add only a minimum amount of herbs or spices, e.g. rosemary.



6TH PLACE

Poland comes 6th in Europe as regards the consumption of game. Most meat from this source is exported out to other EU countries, as an average Pole eats just 0.08 kg of such meat annually. That would compare with an average Swede on 2 kg a year.

A key component of meat from wild game is taurine (for example present at 37 mg per 100 g in red-deer venison!) This is needed for proper functioning of the heart and circulatory system, the CNS and the skeletal muscles. Also, on account of the presence of co-enzyme Q10, the meat of wild animals is recommended as a dietary supplement for those with many different afflictions, including Parkinson's disease. The meat of roe, red or fallow deer, or of boar, is lower-calorie than that from livestock. Thus, 100 g of venison from red deer is of 108–120 calories, compared with the supposedly-low-calorie beef on 217. The venison of various species can be eaten raw as tartare or carpaccio, while that of wild boar (and the beaver now reaching our tables more and more often) will need to be examined for the presence of roundworms. The taste features augment other positive aspects, with the taste of meat reflecting the diet of the animal – very probably forest herbs, fruits, roots and beechnuts.



Stews, goulashes and spam all preserve well, if kept in properly-pasteurised sealed glass jars.



Curing by smoking is the simplest method of preserving meat, and also imparts a very specific colour and taste.

MEAT FROM WILD ANIMALS OR LIVESTOCK?

A 5kg domestic pig fed with artificial additives puts on about 300g in weight each day. A 30kg animal is fattened by 800 g a day. A weight suitable for slaughter of 100–110 kg is thus reached between the 165th and 180th day of an animal's life. The industrial rearing of livestock has no time for sentiment, as what counts is profit, and customer satisfaction, while the significance of the chemicals and antibiotics going into the meat is played down. A boar reaches the same weight as its domesticated cousin after a minimum of 3 years. And in all that time it is eating natural food, and moving – meaning that its muscles really get to work. That all means meat of far greater value.



THE STATE FORESTS AS AN EMPLOYER

Cyprian Przyborowski

It is the task of the State Forests to administer Poland's Treasury-owned forests, but in line with a principle of financial self-support. Assets are maintained or increased – as forest cover rises, while income from wood covers management costs. In fact, the organisation contributes considerable sums to the central budget, as well as securing jobs for over 25,000 people. The State Forests also assigns large amounts to forest education, as well as funding public-administration tasks, including the fight against African swine fever.

The Łódź RDSF has around 1000 qualified personnel. The team supervising the functioning of forests includes foresters, the Forest Guard, administrative employees, accountants, IT specialists and other staff. The Directorate pays particular attention to Health and Safety at Work, and also assures employees of a wide range of non-remuneration benefits, including sporting season tickets, supplementary healthcare packages, co-financed training courses and study. In 2018, it came out with a "Development Academy" Programme of its own, which attracted more than 150 members of staff (or almost one-sixth of employees). The aims included soft-skills development and facilitated participation in postgraduate study.

Łódź-based units of the SF outsource forest services, ensuring work in the forest for as many as 3000 more personnel. Indeed, in central Poland, the wood sector employees perhaps 15,000 people. The commissioning of forest services and new construction and so on all take place in line with the Public Procurement Act, with the result that any unfair competition is prevented.

01



EDUCATION

Specialist training courses are organised for employees, while there is co-financing of studies leading to Engineering, Master's, Doctoral or postgraduate qualifications.

02



HEALTH

Medical care is extended to employees by the SZOZ of the Ministry of Internal Affairs in Łódź. Most units of the RDSF also ensure additional private healthcare packages.

03



H&S

Health and Safety at Work are ensured by ongoing programmes of training, as well as cooperation with forest services departments relating to safety at work in the forest.



THE SF DIRECTORATE
IN ŁÓDŹ IS ONE OF
ITS REGION'S MAJOR
EMPLOYERS



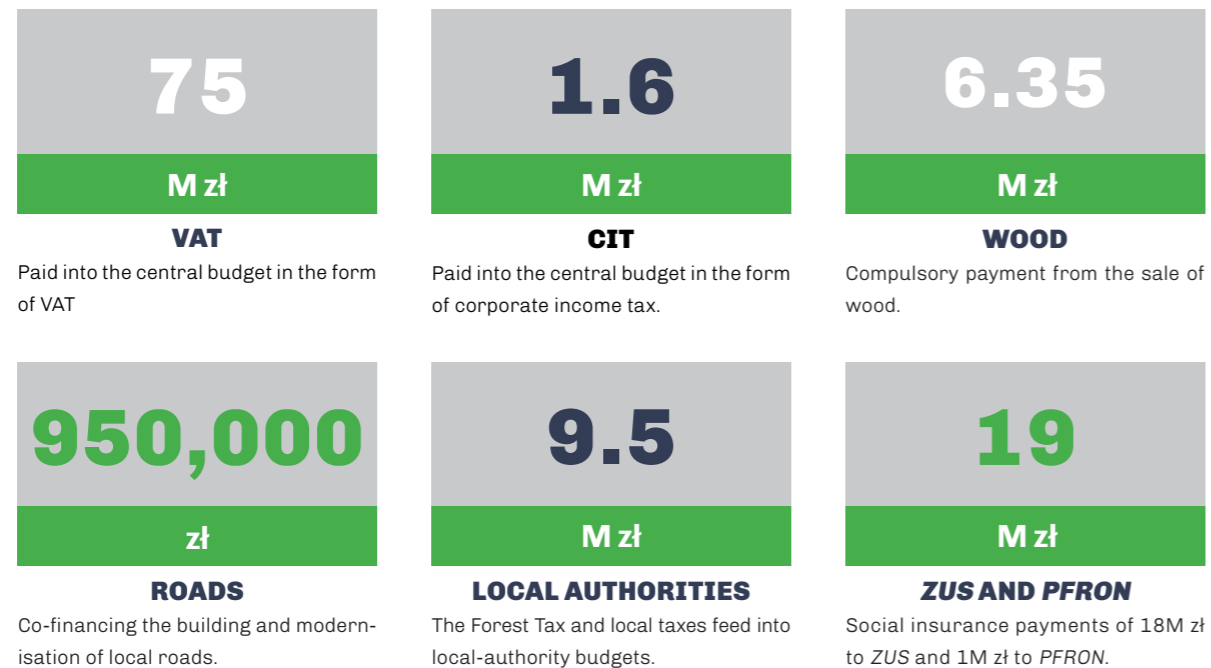
THE STATE FORESTS AS A TAXPAYER

Cyprian Przyborowski

The financial situation of the Łódź Regional Directorate of the State Forests allows for the safe pursuit of sustainable forest management without any more major involvement of external funding.

The main (90%) source of income is the sale of wood. Other income is first and foremost from the hiring or leasing of forest, land and other real estate.

Costs associated with the pursuit of economic activity and activity in line with the mission are funded from own means, as the Łódź RDSF (as a unit of the State Forests) is not part of the public-financed sector and does not require taxpayers' money. Compulsory payment on the sale of wood amounts to 2% of the revenue from sales. Remaining payments arise from engagement in economic activity, with the Directorate in 2018 augmenting Poland's central budget by 103 M zł, including 74M in the form of VAT. Sums paid in 2019 are presented below.



THE ŁÓDŹ RDSF IS A LEADER IN POLAND WHEN IT COMES TO NEW ROAD AND BUILDING DEVELOPMENTS – AND THIS TRANSLATES INTO NUMBERS OF JOBS IN THE REGION.



THE ANIELIN FORESTS

Mateusz Sarleja

“Had the War not broken out, I would have been an Inspector of State Forests in civilian life” – these words from Henryk Dobrzański were recalled by a soldier of his detachment called Józef Alicki. But, while fate would decide that “Hubal” devoted his entire adult life to the fight for his homeland, most of the key events from this last period anyway played out in forests fasts... including in the Łódź region.



Henryk Dobrzański – later nicknamed “Hubal” – was born in 1897 in Jasło. His grandfather and great grandfather had respectively been participants in Poland’s January and November Uprisings (of 1864 and 1830), so Henryk was never a stranger to patriotism. Aged 15, he sought to join the Second Polish Rifle Division, and entered the Legions in 1914. Documents at the Central Military Archive reveal that his officers recalled him as “very courageous, hugely caring of those under and above him, and ready to give his life if ordered to do so”. He rose to Major while still under 30, and was awarded the Silver Cross of the *Virtuti Militari* Order. He was a four-time winner of the Cross of Valour.

His twin passions were the Army and horses, the latter also indulged at sporting competitions, national and international. In the Nations Cup competition he actually received from the Prince of Wales a cigarette case whose inscription dubbed him the best rider among the assembled Officers of All Nations.

MAJOR DOBRZAŃSKI WAS NO PARTISAN. HE FOUGHT ON AS A SOLDIER IN UNIFORM, HOPING TO CARRY ON UNTIL THE WEST CAME TO RELIEVE POLAND.

His September 1939 Campaign experience was as second-in-command to Lt. Col. Jerzy Dąmbrowski, alias “Łupaszka”, who headed the 110th Reserve Regiment of Uhlán Cavalry. When that dissolved, he did not give up the fight, remaining faithful to the oath “I will not lay down my arms, nor remove my uniform – so help me God”, and working to establish with several fellow officers an Army Detachment that he would head through to the end of his days. To do that he stepped down from his post as Commandant of the Kielce District of the Service for Poland’s Victory.

Partisan activity under the pseudonym “Hubal” was engaged in through the Świętokrzyskie Mountains, and in the Włoszczowa, Opoczno and Końskie areas. He was able to move from place to place under the cover of the forest, and his activities earned him such respect from local people that he was always able to count on their support. His role in a political sense – and in terms of morale – was huge. He helped people dispense with their sense of apathy and resignation, offering hope that independence would be regained. And this was exactly what motivated Henryk Dobrzański, who declared: “I shall fight for our soul, our moral backbone, and shall seek to arouse among the people a will to resist, and to fight” (after A. Papee in *Na białą broń*).

He fought his last battle on April 30th 1940 near Anielin, in a copse adjacent to the Opoczno Woods. He died along with his steed “Demon”. The communique in the matter of his death read as follows: “We have lost a man who never broke his soldier’s oath and never cast any shadow over the honour of the Polish soldier. (...) Major Hubal – Dobrzański – is no more. Let the whole nation be aware that it has just lost one of its most priceless people. Someone whose values were led by deeds, not words”.

And although we do not know to this day where the remains of the heroic Major lie, the idea that drove him lives on, and has its symbolic place at the Hubal Sconce – a ring of field boulders laid out in the forest not far from Anielin. Placed centrally within the ring is a larger boulder considered by locals and former subordinates as the place of death of “Hubal”. Commemorations take place each year on the anniversary of the hero’s death.



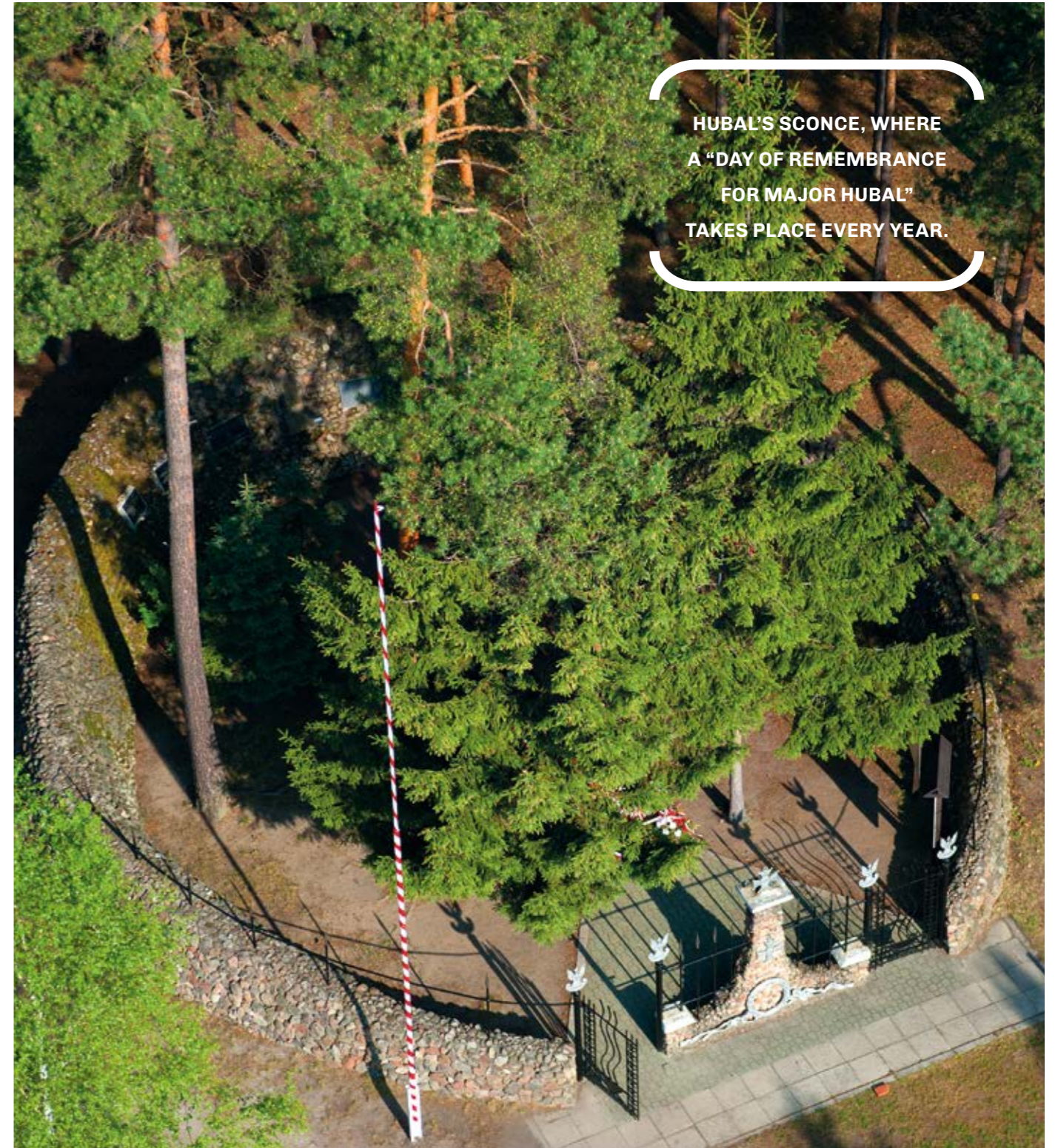
This stone in Królówka Forest Sub-District (Opoczno FD) marks the spot where “Hubal” fell.



At the Hubal Sconce, Director of the Łódź RDSF Dariusz Pieniak is joined by the Chief Forester of Opoczno FD for the wreath-laying.

Occupied Poland's first conspiratorial organisation of a political and military profile was the "Service for Poland's Victory" – which had over 20,000 members by December 1939. Once leader of Poland Gen. Władysław Sikorski had formed the "Union of Armed Struggle" (ZWZ) and sent Poland instructions in this matter, the Service began to convert into the ZWZ, beginning in January 1940.

The Polish Army Detachment that came to be known as "the Hubalczyks" was one of the country's first partisan groupings, in action between the end of September 1939 and June 25th 1940. It split off from the 110th Reserve Regiment of Uhlans after that was disbanded near Kolno. Comprising 180 soldiers, the Detachment headed for Warsaw; but on hearing of the capital's capitulation, Major Henryk Dobrzański offered his men the choice of following him or returning home. Several tens of soldiers ultimately opted to remain with him. They crossed the Vistula near Dęblin and made for the Kielce region. At the moment of Hubal's last battle at Anielin, there were still around 20 in the unit. They vowed to carry on with the fight, but disbanded and went underground on receiving the news that France had fallen.



HUBAL'S SCONCE, WHERE
A "DAY OF REMEMBRANCE
FOR MAJOR HUBAL"
TAKES PLACE EVERY YEAR.



PLACES OF REMEMBRANCE

The Łódź RDSF

HISTORY RECORDED IN THE FOREST VIA CROSSES, MASS GRAVES AND GRAVE PLAQUES MAY OFTEN REPRESENT THE ONLY GUIDE FAMILIES HAVE AS THEY SEEK OUT THOSE CLOSE TO THEM.



Diabla Góra.

Poland's forests have played host to key historical events, above all associated with the country's struggle for independence. Traces of this remain in the form of obelisks, graves, shrines and crosses. Indeed, the Łódź RDSF has several hundred places of remembrance on its territory, and foresters are painstaking in giving them proper attention.

Apart from its natural value, Diabla Góra (in Przedbórz FD) is of historical significance. Battles were fought here during the Kielce region's Peasant Rising of 1844, as well as the January Uprising (1863); and also in the context of partisan fighting by the Home Army and People's Army during WW2. The Home Army partisans are honoured at a monument. In turn, the January Uprising is marked by a shrine in Brudzewice (Opoczno FD), which is attached to a fine ash tree growing near the forester's house. This is a cast sculpture presenting the Virgin Mary with the infant Jesus and St. Anne. The plaque above



A shrine in Brudzewice.



The cross in Wrzaskala Wood.

bears the inscription "1863/WU", with the interpretation of this being that this is the work of Wojciech Urbański of Kuźnice Drzewickie. This was how the artist denoted the place of death of his own son, who died of wounds sustained at the battle around Ossa.

A cross and plaque recalling the heroism of the 1863 insurgents is located in the Wrzaskala Wood (Złoczew FD). Thanks to their being betrayed, a camped detachment of rebels was surrounded by Cossacks, with all murdered bar the officers, who were taken captive and

The military actions of World War II were participated in by 60% of all Poland's foresters, who served with the Union of Armed Struggle, Home Army, Farmers' Battalions, Guards and People's Army. By the time war broke out, every forester from the *Gajowy* through to the Director had had military training. Foresters also played their part in conspiratorial, underground structures. Ordered to do so by the Government Delegation for Poland, Teofil Lorkiewicz founded a secret forest administration whose tasks included the sabotaging of the German administration, the counteraction of over-exploitation of forest, and cooperation with the fighting Underground. At commemorations marking the 76th anniversary of the War's outbreak, a plaque was unveiled in Spała to honour the foresters and wood-industry workers who were murdered in death camps and Gulags, or else the subject of post-War repression.



Brief descriptions of all places of remembrance cared for by foresters are contained in a guidebook *Miejsca pamięci* published jointly by the Łódź RDSF and the Polish Forestry Society. The guide should inspire trips around the Directorate motivated by history. It came out to mark the 150th anniversary of Poland's January Uprising.



The burial mound in Guzów.



The Monument at Załącz Wielki.

sent off to Siberia. There is a shrine to the north of the wood, marking the place where the kitty was hidden by Bronisław Kłodziński of Kliczków Mały – a soldier in the Tsar's army to whom captured officers gave information about hidden money.

The First World War left thousands of victims in the Łódź forests, not least thanks to the use of gas. A mass grave is marked by the burial mound in Guzów (Radziwiłłów FD). The inscription reads: "[...] in memory of the soldiers who fell around Wola Szydłowiecka on February 1st and 2nd 1915, or were gassed on May 31st and July 7th and 9th 1915 – 35,000 in total".

There are of course many other places of remembrance associated with the 1939 defensive war and the subsequent Occupation. At Załącz Wielki (Wieluń FD) the area near the bridge over the Warta features a monument commemorating the battle of September 1st and 2nd 1939. Here, soldiers of Poland's 83rd Rifle Regiment stood their ground against an enemy seeking to take the bridge.

In turn, near Dłutówka (Kolumna FD) – along the road running around the Torfianka Pond, there is a mockup of a Łoś aircraft. It marks the site of a forced landing of one of 3 planes of the 212th Bomber Squadron, which attacked a German motorised column near



The mockup of a Łoś aircraft.



Located in Spała, the Adam Lorek Home in Memory of Fighting and Martyred Polish Foresters and Wood-Industry Workers.

Wieluń on September 4th 1939. None of the aircraft made it back to base, but the crew of the one that managed to land in the forest near Dłutówka did save themselves, *inter alia* with the assistance of peasants working in a nearby field.

The forest near Brwilno (Płock FD) has a 1940–45 mass grave that is the last resting place of almost 400 inhabitants of Płock who included imprisoned patriots, disabled and elderly people taken from care homes and Jews from the Płock Ghetto. The plot next door has a cross and stone marking the place of execution of junior forestry employee Władysław Lewandowski, a soldier of the Home Army who hid associates in a bunker he had constructed himself.



The mass grave in the forest at Brwilno.



TO THE FOREST FOR OUR HEALTH

Izabela Randak

Diseases of civilisation, feeling low, overwork and stress – all key words that we are more and more likely to reel off in one breath, as we seek to describe our quality of life. But within reach of all us, there is a ready, tested and free-of-charge medicine called the forest.



25
MINUTES

spent in the forest lowers the level of cortisol – the hormone associated with stress.



1 ha
OF JUNIPER

each day releases 3 kg of phytoncides capable of spreading out over the area of a large city.



71%
OF SUFFERERS

from depression experience an improvement in the way they feel if they have been taking regular forest walks.



Tree therapy

In the course of a year, a single tree produces the amount of oxygen needed by a person for two years. Record oxygen-generating species are beech, maple and oak – trees that are fortunately not lacking in our forests.

Trees absorb and deal with toxic substances. A spruce hedge planted along even a busy street will sequester as much as 70% of the pollutants emitted.

In these days of repeated droughts and water shortages, we should recall that, each season, a tree a couple of decades old will release several hundred litres of water to the atmosphere. This is one reason why we breathe better in forest.

TOURISTS APPRECIATE THE PEACE
AND QUIET, THE CLEAN AIR,
AND THE POSSIBILITIES FOR
UNHINDERED CONTACT WITH NATURE.



TIME SPENT REGULARLY IN THE FRESH AIR ALLOWS FOR
THE GENERATION OF THE PROPER DOSES OF VITAMIN D
SO VITAL IN DISEASE RESISTANCE AND IMMUNITY.



Grotniki FD's *Brzegiem Lindy* ("Banks of the Linda") Educational Trail.

City air is said to have 50–70 times as many pathogens in it as forest air, and the presence of ethereal oils emitted by conifer trees has a lot to do with that.

A walk among trees is a kind of a forest bath, which allows people to maintain psychological balance, with the immune system strengthened and the organism stimulated into renewal.

Those who need to calm down and lower their blood pressure should take a walk into dry pine forest. In contrast, if it is some arousal that is needed, or else an improvement of mood or better concentration, then oak-lime-hornbeam forest is a more suitable venue.

Be convinced

When we say "forest", we think trees, but in fact a forest is a multi-element complex that begins with the soil into which roots grow. Then there is the whole green mass of plants as oxygen factories at work each day, as well as a wealth of different animals.

Those who leave the concrete surface behind to take a walk in the woods will be resting each and every joint. The spine and feet both notice a clear difference when there is freedom to move around on the unpaved surfaces of forest tracks and trails.

What does forest offer apart from wood? Raspberries, cowberries, wild strawberries and above all fungi – but those are all obvious answers. A place in which many herbs grow, but also honey that goes on our morning toast. And when we have less confidence in meat that is produced using "industrial" methods, we can join the trend towards wild game being discovered anew, in all its taste and nutritional value, and with all its attention to culinary traditions. So maybe, instead of another weekend in the city of crowded malls, it would be better for us to give our lungs and minds a rest? Make the most of those forest gifts, listen to the wind in the trees, walk a little, and then sit and experience that silence missing in all of us in recent times? Where attention has to be divided among so many things at the same time, burnout looks inevitable. But nature helps with the regeneration.



TREE THERAPY

This is no myth – at the end of the 1990s, Japanese researchers sought to demonstrate scientifically the health benefits for the human organism of time spent in forest. Among other things, they were able to show that even a short time among trees gives rise to a distinct fall in stress-hormone levels.



HELPFUL MAP

A helpful acquaintanceship with all the forests in the Łódź region is possible thanks to descriptions readily findable on our online map accessible at www.bdl.lasy.gov.pl/mapa. Prior to a trip to a place that is not so well-known, visitors should install the free mBDL app, which will allow them to find their way home, and will supply coordinates to rescuers in the event of someone becoming lost, or otherwise getting into distress.



FOREST EDUCATION AND ENTERTAINMENT

Each year the State Forests organises many interesting outdoor events, such as mushroom-picking, treeplanting, forest runs, etc. Each Forest District pursues its educational activity addressed to children and young people, but also adults. Classes are run at places in the forest and along educational trails. The full offer is given on Forest District websites, the czaswlas.pl portal and social media run by foresters. What is planned in different forest areas can also be learned about at Forest Inspectorates.



Kids at schools placing major emphasis on classes in the fresh air have better results than those learning by the traditional "classroom and book" methodology.



ENSURING A SAFE FOREST

Gabriel Olejnik

As a manager of forest areas, the State Forests engages in activity that protects assets and combats harmful human activity. First and foremost, this entails prevention and education, cooperation with other public-order services (Police and Fire Brigade), training and monitoring.

Harmful activity in forests is taken to entail unlawful utilisation of forest, collecting of forest products and infringement of regulations relating to state-owned forests. The most frequent kinds of harm to be noted include:

- the leaving of litter,
 - unauthorised entry into a forest by vehicle,
 - abuse of the recreational function in forests (e.g. horse riding away from marked trails),
 - illegal felling and theft of wood,
 - poaching,
 - infringement of state of possession,
 - unlawful changes of designation of land or their exclusion from forest production,
 - arson, or failure to heed fire-prevention regulations and rules regarding conduct in the forest.
- All employees of the State Forests are obliged to safeguard the forest against these harmful activities. However, the main tasks in this regard are

discharged by employees of the Forest Service, in the field in particular (Foresters and Under-Foresters), as well as of the Forest Guard (*Straż Leśna*).

The Forest Service in the field observes the land under its supervision all the time, and so can react immediately should there be any sign of activity detrimental to the State Forests.

Preventative and educational activity is also engaged in, among other things in cooperation with educational institutions, to help protect the forest from harm.

For its part, the Forest Guard is entitled to carry out checks on tourists and those gathering products from the forest floor. Other kinds of check authorised by the SF Director-General or the Director at a Regional Directorate can also be carried out. In addition, they may take part on patrols linked with safeguarding the forest against



An unsettling threat to forests is that posed by people's lack of feeling of responsibility for a common good. In this way they give silent agreement to committed crimes and misdemeanours that result in damage to forest.

fire, as well as in public campaigns. There is close collaboration with units of the Police, State Fishing Guard, City Guard, Municipal Police and Road Transport Inspectorate.

Put together, the commitment of all employees of the State Forests in protecting property and combating activities capable of doing harm and damage has its own tangible effect on the state of forests throughout the country.

Forest protection also denotes care for biodiversity and protection against threats of many different kinds (including natural

disasters, outbreaks of insect pests, tree diseases, fire and pollution). In this way, foresters not only take care of nature, but also make it possible for Poles to make safe use of it – in the sense of safe for both users and the forest itself. Areas under the management of the State Forests have many available car parks, bivouacking sites and tourist sites, as well as over 1000 educational trails. Thanks to a continuous educational effort, more and more people are making responsible use of the common good that the forest represents.



In any case in which there is even a suspicion of activity harmful to forests, the Forest Guard (*Straż Leśna*) should be informed without delay. Where that is not possible, other units of the State Forests (not least the Forest Inspectorate) may also be contacted; or else the Police.



PROMOTIONAL FOREST COMPLEXES

The Łódź RDSF



The Promotional Forest Complexes (PFCs) are large contiguous areas of forest in one or several Forest Districts designated across Poland. They present variability of forest site types, the diversity of forest species composition and the many and varied functions perform. Within PFCs, foresters promote sustainable management, support scientific research, and pursue educational activity where nature and ecology are concerned. These are experimental areas in which new forest technologies are tested, research work carried out and pilot programmes introduced. The PFCs also offer fora at which foresters can cooperate with the public. It is also worth stressing that the PFCs are an original, native Polish idea by which ecological forestry can be further promoted.

Within the area administered from the Łódź RDSF there are two PFCs – of the Gostynin-Włocławek Forests, and of the Spała and Rogowo Forests.

The Gostynin-Włocławek Forests Promotional Forest Complex

is located in Mazowieckie voivodeship, and includes the Forest Districts of Gostynin and Łąck, as well as Włocławek (under the Toruń RDSF). In existence since 1995, this PFC covers more than 53,000 ha. The stands here occur mainly on dune-covered terraces by the River Vistula, forming pretty much the only contiguous forest community anywhere in the Kujawy and Mazowsze regions known for their limited forest cover. The PFC includes 16 Nature Reserves, of which 11 have a Forest Reserve designation, while 5 involve lakes and forest. There are also 60 Monuments of Nature. Special protection is extended to the nests and breeding sites of

black storks, cranes, white-tailed eagles, and other birds of prey. 50 protected and rare species of plant are also present.

The Spała and Rogowo Forests Promotional Forest Complex

includes parts of the two Forest Districts of Spała and Brzeziny, as well as the Rogów-based Forest Experimental Station of Warsaw University of Life Sciences (SGGW). Involved here are Rogów FD, the Nursery Training Centre, Arboretum and Nature-and-Forest Education Centre. This PFC came into existence in 2002 within Łódzkie voivodeship, and covers 34,000 ha. It includes remnants of the former *Puszcza Łódzka* and *Puszcza Pilicka* Forests, hence the presence of old trees – especially in the Spała, Konewka and Liciażna areas. Particularly valuable features of the landscape are present in the Spała and Wzniesienie Łódzkie Landscape Parks. Foresters here strive to preserve the natural plant cover with oak and beech stands, as well as swamp forests along rivers and streams. Also protected are the Rivers Mrogi, Gać Spalska, Rawka and Mrożyca and their tributaries, as well as nearby meadows, peatlands and swamps. In the Spała-Rogów Forests, it is worth visiting the Lasy Spalskie Nature Trail beginning at the Home in Memory of the Fighting and Martyred in Spała, the old German bunker in Konewka (a shelter for Staff trains operating as mobile command centres); and the Arboretum and Museum of Forest and Wood at SGGW's aforementioned Rogów Station (*Leśny Zakład Doświadczalny*).



WORTH KNOWING

We should always remember that there are areas of forest permanently out of bounds to people. These include new plantations of trees up to 4m tall, experimental areas and seed stands, refuges for animal species, springline areas and areas threatened by erosion. While in the forest, we also need to take careful note of any noticeboards, as these always offer important information.

The alpinarium at SGGW's Rogów Forest Experimental Station, within its Arboretum. Many rare species of plant can be admired here.

