

RARABAR REPORT

ANNUAL REPORT 2013



4-5 ADDRESS BY THE CHAIRMAN OF THE BOARD

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Abstracts from RMK's 2014 campaign "Aitäh, mets!" ("Thank you, forest!") have been used in the Yearbook. In these abstracts, people who spend a lot of time in nature due to their work or hobby are speaking about their relationship with the forest.

RMK is the keeper, protector and manager of the forest and other natural biotic communities belonging to the Republic of Estonia.

RMK earns profit for the state by managing the forest, and ensures the stability of the timber market as the largest forest owner. Tasks that do not bring economic profit, but are beneficial in some other way, are equally important: nature protection works, creation of free recreational opportunities, provision of nature education, etc.

The main areas of activity of RMK are:

- forest administration
- forest management and nature protection
- timber marketing
- visiting organisation and nature education
- seed and plant management



ISO 14001 ISO 9001



esponsible fores management

RMK has been awarded the ISO 14001 Environmental Management Standard and the quality management certificate ISO 9001, as well as the sustainable forestry certificate FSC® and PEFC.

RMK employs over 700 people. In addition, RMK provides contractual work for several thousand people in Estonia.

Starting in 2014, RMK is also active in fish farming because the Põlula Fish Farm, located in Lääne-Viru County, was added to the composition of RMK. Elistvere Animal Park, Sagadi Forest Centre, Tartu Tree Nursery and 70% of the Estonian-Finnish joint undertaking AS Eesti Metsataim also belong to the composition of RMK.

MOVING AT A STEADY PACE **TOWARDS NEW** HORIZONS



Aigar Kallas

The objectives set for RMK with the development plan for 2011–2014 were reached by the end of 2013. We have achieved the expected numbers in the volumes of all forest works, and our latest achievement - the volume of forest road construction and reconstruction of drainage systems - reached the level at which it is possible to bring the roads and ditch network into operating condition. Only, of course, in those areas where it is necessary and justified. The final result will require a couple of years to be reached, but in the words of our own people – there is a light at the end of the tunnel, as unbelievable as that may seem!

The biggest change in 2013 took place in connection with practical nature protection works. RMK's Supervisory Board supplemented the existing development plan with nature protection objectives. We have significantly expanded our activities in this field, using our own funds as well as allocations from the European Regional Development Fund. Still, 2013 can be viewed as a year of preparations because several works – starting with the construction of meadow bridges and ending with the restoration of bogs – will take many years before results will be seen.

Approval of the Hunting Act by the Estonian Parliament Riigikogu was a major breakthrough. Today, the hunting areas of state forests are regulated by contracts and control by landowners over what is happening in the field of hunting has been achieved. I am pleased that we were able to quickly strike a balance between somewhat opposing interests through cooperation between forest owners and hunters.

In the field of visiting organisation and nature education, we can be happy with the fact that the infrastructure that was given to us in 2009 in an uneven state – the trails, signs, towers, nature centres – has been restored and given a new look thanks to European funding. This was the main focus of our attention in recent years. Now, we must direct our focus back to the restoration of recreational objects built beforehand by RMK. since otherwise the objective of ensuring uniform quality will not be ensured.

Another aspect worth emphasising is the activity of our Research Council, whose funding decision supported the initiation of a large-scale research

Important in 2014

- Finding alternative uses for low-quality timber
- Implementation of amendments to the Forest Act
- Changing the transport restrictions regarding the weight of forest trucks
- Creating a network of connecting corridors for flying squirrels' nesting

project for the more efficient protection of capercaillies, as well as research studying the introduction of cutting methods that are more pleasant to the human eye and resemble nature's own disturbance regime. Since the projects are still in their implementation phase, it is too soon to assess their effectiveness, although we have certainly created preconditions for forest management and nature protection that are better thought-through and implemented. Especially since the projects include researchers, practitioners, and representatives of NGOs, which creates a much stronger basis for the implementation of results.

The fact that the objectives of the development plan were achieved at a steady pace does not give us a reason to rest on our laurels. The highest turnover of all time, and the second highest profit figures witnessed in 2013, demonstrate that RMK has the capacity to manage also under relatively poor market conditions. We have plenty of ambition – new challenges can be expected from the new development plan, which should be compiled before the end of the year already.

Restocking of at least 100,000 young salmons to the rivers of North Estonia

THE YEAR IN NUMBERS

State land managed by RMK ... of which forest land

Employees

Turnover Profit Proprietary income to the state budget Land tax

Renewed forest area Planted forestry plants

Number of visits to RMK recreational and protected areas

1,179,841 ha 875,305 ha

745

EUR 155 million EUR 31.5 million EUR 20 million EUR 4.3 million

6,628 ha 18.4 million

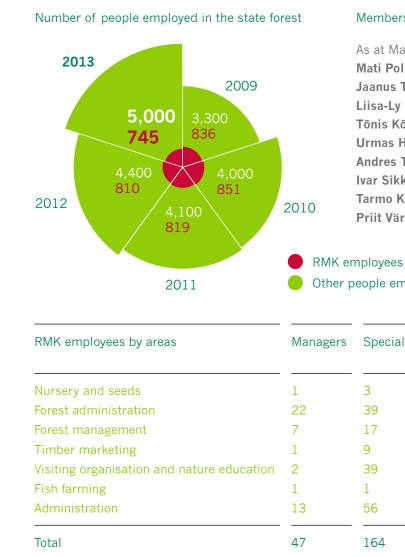
1.7 million





From 2014, RMK also includes Põlula Fish Farm. As at the beginning of 2014, 7 people are employed by the department created for that purpose.

EMPLOYEES



Members of the Supervisory Board of RMK

As at March 2014: Mati Polli, Estonian Forest Industries Association Jaanus Tamkivi, the Riigikogu Liisa-Ly Pakosta, the Riigikogu Tõnis Kõiv, the Riigikogu **Urmas Hallika**, Ministry of the Environment Andres Talijärv, Ministry of the Environment Ivar Sikk, Ministry of Finance Tarmo Kruusimäe, Estonian Youth Work Centre Priit Värk. Estonian Owners Confederation

Other people employed in the state forest

cialists	Task managers	Employees	Total
	6	33	43
	88	0	149
	106	217	347
	2	0	12
	46	12	99
	0	5	7
	0	19	88
	248	286	745

SURVEYS

State enterprise with the best image

According to a survey on the reputation and image of large Estonian enterprises. RMK is the state enterprise with the best image. RMK improved its position in both of the main criteria viewed compared to 2012 – both in the strength and the appeal of the organisation. While RMK was the best among state enterprises, in the context of all organisations it ranked ninth, rising five places during the year. As to overall reputation, RMK ranked 15th among the 83 large companies that participated in the survey, which is six positions higher than in 2012. The survey was carried out by TNS Emor.

According to a TNS Emor survey that views both the reputation of the employers and the expectations of employees, RMK is one of the most popular potential employers, among both state and privately-owned enterprises. 74% of working people and students would consider working in RMK. The respondents cited stability, interesting and diverse work, success and an open and stress-free working environment as the main strengths of RMK.

Meaningful brand

A global brand survey "Meaningful Brands", carried out in Estonia for the first time, revealed that the Estonian people see RMK as caring, friendly, reliable, open, and available. 48% of the respondents would care if RMK were to disappear, and 44% can feel the positive impact RMK is having on the people and the environment. RMK's result significantly exceeded the average of the Estonian top brands.

Better known among Russians

Active work carried out in recent years among the Russian-speaking population of Estonia has borne fruit and increased the recognition of RMK among this target group.

The spontaneous image of RMK continues to centre around nature tourism. However, the role of RMK in establishing new forests, growing forest plants, nature protection and improvement of the awareness of nature are also well recognised when listing the different activities of RMK; forest cutting and sale of timber follow after.

RMK is characterised as an organisation that does necessary work and is active, environmental and nature friendly. The assessments of the effectiveness of RMK and its importance as an employer and profit-earner for the state were a bit more modest.

91% of the respondents had visited a forest in the last six months – mainly for walking and enjoying the peace and quiet (69%), but also berry and mushroom picking (66%) and on an active holiday (43%).

The recognition and reputation survey of RMK was carried out by Faktum & Ariko and, in addition to the respondent panel that covered the entire population, an additional survey was organised for non-Estonians living in Ida-Viru County.

Recognition of RMK (%)

Average	71%
Estonians	93%
Russians	67%

COOPERATION PROJECTS

Promoting the use of timber

RMK selects the cooperation projects based on whether they help to promote the use of timber and forestry, improve the nature awareness of the participants, and encourage people to actively discover beautiful Estonia.

In 2013, RMK gave a helping hand (and often also a load of logs) to several undertakings that refine timber:

- Emajõe Lodjaselts received timber for the construction of a two-mast Peipsi barge
- wooden ship society Vikan built a supporting boat for the schooner Hoppet
- Under a cooperation project between Raudlaeva Maja and the Estonian Maritime Museum, the Vikan craftsmen made a copy of the starboard lifeboat of ice-breaker Suur Tõll: construction of the port side lifeboat is still underway
- Estonian Woodhouse Association organized a professional competition for builders of log houses
- Estonia's logging championships and Varbola Wood Days were held



following:

- Forestalia, the male choir of forestry workers
- Schilling, a festival of beautiful music Ökomeedia (www.bioneer.ee)

- at school")
- youth conference "Lahe koolipäev" ("Cool day

About the Organisation

- RMK also continued its cooperation with the
- RMK Kõrvemaa Complex Event
- Raadio 4 series "Metsas nagu kodus" ("At home in forest")
- newspaper MK-Estonia, section "Metsa teated" ("Forest News")
- MK-Estonia and TV-channel PBK, forest planting day "Roheline Jaine" ("Green Wave")
- nature photography competition "Vereta jaht"
- ("Bloodless Hunt")

THE YEAR IN NUMBERS

State forest reserve Renewed forest area Planted forestry plants

Cleaning Thinning Regeneration cutting

Sold timber

... from which forest material ... from which wood chips and residuals

Income from the sale of timber ... of which the sale of forest material ... of which the sale of wood chips and residuals

Realized forest seed New stocked seed Total balance of seeds

Reconstructed and renewed drainage systems Total drainage systems managed by RMK Reconstructed and renewed forest roads Total forest roads managed by RMK Investments into forest improvement works 159 million m³ 6,628 ha 18.4 million

18,150 ha 10,778 ha 8,717 ha

3.4 million m³3.2 million m³0.2 million m³

EUR 145.9 million EUR 139.9 million EUR 6 million

902 kg 5,690 kg 7,635 kg

17,063 ha 444,205 ha 349 km 8,300 km EUR 19.9 million

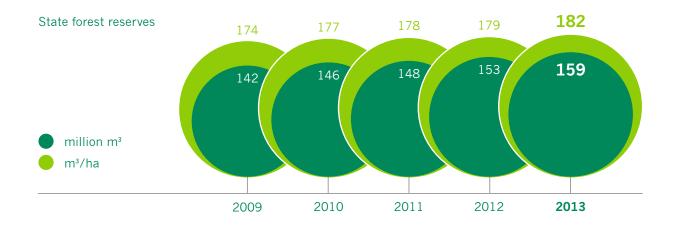
FOREST MANAGEMENT



FOREST LAND OVERVIEW

RMK area of forest land and reserves by species of trees

Species	Area		Stock			
	ha	%	m ³	%	m³/ha	
Pine	380,056	43.4	77,034,000	48.5	203	
Birch	256,346	29.3	41,388,000	26.1	161	
Spruce	182,638	20.9	30,389,000	19.1	166	
Aspen	28,868	3.3	5,316,000	3.3	184	
Black alder	14,157	1.6	2,726,000	1.7	193	
Grey alder	8,993	1.0	1,318,000	0.8	147	
Others	4,247	0.5	740,000	0.5	174	
Total	875,305		158,911,000		182	



CUTTING WORKS

Cutting in state forests (ha)

	2009	2010	2011	2012	2013
Thinning	8,597	11,136	13,602	11,895	10,778
Regeneration cutting	7,324	8,293	8,340	8,606	8,717
Sanitary cutting	7,610	6,174	7,487	10,362	6,854
Deforestation	702	421	1,107	551	1,142

How is it today?	 The volume of thinning is planned to be shortcomings of the previous decade has
<u>,</u>	 A thorough inventory of forest damages her need for sanitary cutting. RMK will a planted forests and cleaning by 15%.
	The volume of regeneration cutting in the

be reduced in 2014 because the have been made up for.

es carried out in 2013 calls for a hig-I also increase maintenance of young

The volume of regeneration cutting in the state forest has been and continues to be about 1% of the total area of RMK's forest land per annum.

FOREST RENEWAL

Volume of forest renewal	2009	2010	2011	2012	2013
Soil mineralization, ha	3,585	4,120	5,226	4,426	6,706
incl. to promote natural renewal	504	249	529	446	1,096
Total sowing and planting, ha	4,211	4,410	4,930	6,188	6,280
of which sowing, %	13	20	8	9	7
of which planting, %	87	80	92	91	93
Helping natural renewal, ha	141	217	258	313	348
Supplementing forest renewal, ha	1,630	2,177	2,197	2,205	2,955
Planted seedlings, million	10	10	13.4	17.4	18.4
of which container seedlings, %	34	33	36	26	34
Maintenance forest renewal, ha	12,057	13,391	15,978	18,751	20,865
Maintenance of young stand (ha)	2009	2010	2011	2012	2013
Clearance	12,220	14,121	15,624	16,481	18,150
Forest renewal by the main tree species (ha)	2009	2010	2011	2012	2013
Spruce	2,621	2,473	2,802	3,169	3,368
Pine	1,393	1,828	1,951	2,905	2,724
Birch	313	294	413	399	516
Others	24	27	23	28	21
Total	4,351	4,622	5,189	6,501	6,628

18.4 million trees

A great cone year

RMK planted 18.4 million trees, a million more than in 2012. Forest renewal was the most active in Ida-Viru County, where more than 2.5 million trees were planted.

Most of the trees were planted in spring, but for the second year in a row, forest was also planted in autumn. RMK hired an additional 2,000 seasonal workers for that period.

The most planted tree species, with 9.8 million seedlings, was pine; it was followed by 7.6 million spruces and 1 million birches; alders and oaks were also planted.

RMK created new forests by planting trees, seeding, or leaving the area to regenerate naturally.

Reconditioning works in forest parks

RMK seriously undertook reconditioning of the forest parks of Tallinn. The main works were done in the forests of Pirita and Stroomi, where driedout, sick, and dangerous trees were removed from around the forest trails on a total of 110 hectares. Reconditioning of the rest of the forest parks depends on how fast an agreement can be reached with the city on the issue of ownership of the forest land.

The good cone year improved the stock of spruce seeds that had shrunk to a critical level. Now it is sufficient to renew the state forest for the next 15 years. From November 2012 to March 2013, a record breaking 5,207 kg of spruce seeds were stored. RMK bought the 477,850 litres of cones needed to obtain seeds mainly from private persons who had gathered them from the cutting areas of the state forest. The best gatherers could earn a day's salary of up to EUR 400.

In addition, 483 kg of pine seeds were collected, being sufficient for about a year. Unlike pines that produce cones almost every year, spruce seeds can be gathered much less frequently. The collected seeds will be used for forest seeding and growing forest plants.

Estonian seed stock (kg)



TIMBER MARKETING

Sale of timber (m³, %)

	2009	2010	2011	2012	2013
Logs	1,084,000	1,152,000	1,227,000	1,249,000	1,356,000
	46%	41%	41%	40%	40%
Pulpwood	939,000	1,174,000	1,151,000	1,158,000	1,233,000
	40%	41%	38%	37%	37%
Firewood	259,000	250,000	294,000	399,000	571,000
	11%	9%	10%	13%	17%
Wood chips and residuals	71,000	268,000	330,000	318,000	211,000
	3%	9%	11%	10%	6%

3,371,000

Biggest clients by the amount pure	chased (m ³)
Stora Enso Eesti AS	343,000
Horizon Tselluloosi ja Paberi AS	232,000
Estonian Cell AS	209,000
Metsä Forest Eesti AS	171,000
Repo Vabrikud AS	136,000
Toftan AS	107,000
Södra Eesti AS	97,000
Viiratsi Saeveski AS	91,000
Laesti AS	88,000
Lignator Logistika OÜ	88,000



Average price of the sold timber (EUR/m³)

Market was kept up by conifer logs

Fire

The situation on the timber market improved slightly, mainly thanks to an increased demand for conifer logs. The price of spruce and pine logs increased throughout the year and thus compensated for the decrease in the price of birch logs, pulpwood, and firewood. The price of conifer logs grew by almost 10% during the year. Competition on the market was raised by the increased activity of Chinese wholesale buyers.

Demand for conifer pulp wood increased in the second half of the year, while demand for birch pulp wood dropped. As an annual average, the price of spruce and pine pulp wood increased by 5%, while that of birch pulp wood dropped by 6%, resulting in a great deal of insecurity regarding the future.

On the firewood market, overproduction and the overall low state continued. The sales price dropped by 6% during the year, also holding back the price of woodchips, which remained practically unchanged during the year.

The average price of the forest material sold was 44.3 EUR/m³, the corresponding number for wood chips was 28.4 EUR/m³ and for cutting waste, 8.1 EUR/m³. Logs accounted for 40%, pulp wood 37%, firewood 17%, and wood chips and cutting waste for 6% of the sales volume of 2013.

The forest is cut from where it is the most necessary at the moment and where it is the most accessible with our equipment. It is a compromise between the needs of the forest and our capabilities.

Firewood from the state forest

Getting firewood from the state forest was made easier for private consumers. There are now three possibilities via a joint ordering system: to place an order for firewood that would then be brought to your home, to buy a cutting permit for growing wood, or to gather stumps and branches from cutting areas.

While previously private consumers could submit their purchasing requests via the joint ordering system only for firewood sold as 3-meter chunks, starting in the spring of 2013, one could also use it to show interest in purchasing firewood as a growing forest or as stumps, thicker branches, and tree-tops from cutting areas. There is no need to turn to a RMK forest district any more.

In 2013, RMK sold 3 metre firewood with transport in the total amount of 18,000 m³, sanitary cutting as a cutting permit for a growing forest in the volume of 18,000 m³, and cutting waste from cutting areas in the amount of 1,000 m³. As a result of the changed sales organisation, the sales of 3-metre firewood increased by 17% while the sale of cutting rights dropped by 50%.



FOREST IMPROVEMENT

Restoring forest roads

Renewal and reconstruction of forest roads and drainage systems, which were neglected in the 1990s and at the beginning of 2000s, has gradually gained momentum. RMK invested almost EUR 20 million into the above in 2013; the amount will increase by another 20% in 2014. By continuing at this rate, it would be possible to renew the entire network of roads and drainage canals in the state forest in the next 8–10 years and to ensure a safe and comfortable movement for all users – berry pickers, holidaymakers, rescue workers, timber cutters, etc. A total of 349 km of forest roads and 17,063 ha of forest drainage systems at 144 objects were renewed and reconstructed during the year.

Forest drainage systems are renewed to preserve the previous additional increment of timber and its better quality. No new drainage systems will be built in the state forest, and the existing ones will not be reconstructed in the forests under strict protection.

Almost half of the forest land owned by RMK has been drained; the total length of forest roads is 8,300 km.



EXTRACTION OF SAND AND GRAVEL

Sand and gravel extraction (m³)

Year/ Quarry	Karu- järve gravel quarry	Pajaka earth materials quarry	Taga∙ nõmme sand quarry	Voola sand quarry	Massiaru sand quarry	Välgi III sand quarry	Määro gravel quarry	Hertu gravel quarry	Total
2009	4,022	7,497	12,098						23,617
2010	7,741		18,012						25,753
2011	8,000		33,658						41,658
2012	7,239	2,920	12,930	10,931					34,020
2013	9,453	80	0	5,013	13,164	28,465	510	6,033	62,718

AFFORESTATION OF QUARRIES

New green life of quarries

The North-East region of RMK afforested 287 hectares of exhausted quarry areas in 2013. On the order of Eesti Energia Kaevandused AS, pines and birches were planted on 251 hectares, and on the order of Kiviõli Keemiatööstuse OÜ, 36 hectares were covered with pines, birches, and larches.

WASTE COLLECTION

Waste collection in state forests	2009	2010	2011	2012	2013
Amount (kg)	250,000	146,000	317,000	170,000	164,500
Expenses (EUR)	31,300	21,000	32,000	29,000	37,200

A clean forest with the help of partners

The waste situation in the forests has not improved much. RMK is spending more money on cleaning by using helping hands and special equipment needed for collection of hazardous waste.

The most problematic areas continue to be around towns in Ida-Viru and Harju counties; the annual waste collected from these areas makes up almost half of the waste removed from the state forest. Most of the almost 165 tonnes of waste collected is everyday waste, mainly construction waste. 10 tonnes of hazardous waste was removed from the

state forest, most of it being asbestos cement that is unfortunately being dumped by truckloads under the forest. EUR 37,200 was spent on waste removal during the year.

The amount of waste is also affected by the fact that RMK constantly acquires state land that has not been reformed so far. Such areas often suffer from increased local pollution from the past, and now it is the task of the land owner, that is RMK. to eliminate that pollution.

HUNTING

The new Hunting Act entered into force

As a result of the new Hunting Act, which entered into force on 1 June, RMK concluded new agreements with the users of hunting areas for the use of state land for hunting purposes.

According to the standard contract that was prepared in cooperation with the Estonian Hunters' Society, the use of state land for hunting purposes in a hunting area is free of charge. Hunters can hunt for large and small game, maintain the game and construct hunting facilities, but all material game damage must be compensated. The substantive implementation of the new Hunting Act begins in 2014.

EUR 2.59.

FOREST FIRES

Forest fires in state forests	2009	2010	2011	2012	2013
Number (pcs)	20	13	12	0	7*
Area (ha)	32	19	13.7	0	186.4
Average fire area (ha)	1.6	1.5	1.1	0	27

* Including reed fire in Lääne county

With the auction of hunting permits for large game, which turned out to be more competitive than usual. RMK earned more than EUR 300,000 that will be shared with land owners who allow hunting on their registered immovable. Bids were made for all 20 hunting districts with the average price for one hectare of hunting ground being

RMK is using 155,600 hectares of hunting land, 22% of which belongs to private land owners. The average area of a RMK hunting area is 6.900 hectares.

THE YEAR IN NUMBERS

Species under protection458... incl. added during the year22Protected species habitats20,506... incl. added during the year3,666

Key biotopes ... incl. added during the year

Total area of key biotopes ... incl. added during the year

Semi-natural biotic communities managed ... incl. added during the year

Expenditure on nature protection

14,398 ha 303 ha

8,639

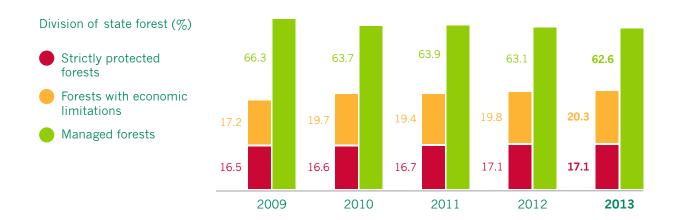
2,924

14,509 ha 6,815 ha

EUR 1.1 million

NATURE PROTECTION

DIVISION OF STATE FOREST



PROTECTED AREAS

Protected Areas in state forests (ha)

Limited mgmt. zone of the Protected Area60,884Limited mgmt. zone of Species Protection Site29,060Special mgmt. zone of Species Protection Site20,742Special conservation area18,394Protected Area without protection rules3,263Strict nature reserve of a Protected Area3,063Single object in nature81	Special mgmt. zone of the Protected Area	115,433
Special mgmt. zone of Species Protection Site20,742Special conservation area18,394Protected Area without protection rules3,263Strict nature reserve of a Protected Area3,063	Limited mgmt. zone of the Protected Area	60,884
Special conservation area18,394Protected Area without protection rules3,263Strict nature reserve of a Protected Area3,063	Limited mgmt. zone of Species Protection Site	29,060
Protected Area without protection rules3,263Strict nature reserve of a Protected Area3,063	Special mgmt. zone of Species Protection Site	20,742
Strict nature reserve of a Protected Area 3,063	Special conservation area	18,394
	Protected Area without protection rules	3,263
Single object in nature 81	Strict nature reserve of a Protected Area	3,063
	Single object in nature	81

SPECIES UNDER PROTECTION

458 protected species

458 protected species are registered in RMK areas, 22 of them were registered for the first time in these areas in 2013. This included 1 and 8 of the most strictly protected species of categories I and II, respectively, and 13 species of category III with a less strict protection regime.

However, the number of the species alone does not give an overview of the change in the protection status of the protected species. An important indicator is the number of locations in which the protected species are found, in which a location is defined as the habitat of a specimen of a species or the group habitat of plants that grow in groups, the nesting place of birds, etc. As at 2014, there were 20,506 protected species habitats within RMK's areas; 3,666 new habitats were added during the year. unde

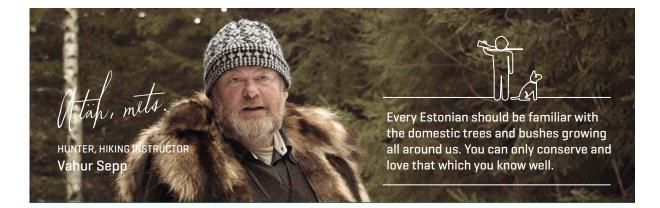
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oxyporus philadelphi, white-tailed bumblebee, common carder bee, brokenbelted bumble-bee, red-shanked bumblebee, red wood ant, formica polyctena, varnished hook-moss, grass snake, sowerbyella imperialis, long-leaved thread moss, tundra warnstorfia moss, and little grebe

The more precisely we know the habitats of the protected species, the better overview we have of their number and the more efficiently we can protect them.



New species that have been placed under protection in RMK areas

I PROTECTION CATEGORY:

seligeria patula

II PROTECTION CATEGORY:

black guillemot, wrinkle-leaved feather-moss, alder amanita, wild garlic, chocolate chip lichen, Danish scurvy-grass, ortolan, biatoridium monasteriense

III PROTECTION CATEGORY:

KEY BIOTOPES

On more than 14.000 hectares

As at the beginning of 2014, there are 8,639 key biotopes found within RMK's lands, covering a total area of 14,398 hectares, including 5,710 ha of key biotopes that completely correspond to the requirements set in the Forest Act. and 8.688 ha of areas with the elements of key biotopes. A total of 2,924 key biotopes were added during the year. RMK also views the areas possessing elements of

key biotopes as key biotopes, and ensures equal protection on these areas.

A key biotope is an area of up to seven hectares that needs protection, is located outside of a protected nature object, and is highly likely to accommodate endangered, possibly endangered or rare species.

communities of the Pirita dale protection area, and the opening of views, were completed. The total cost was EUR 94,273.

2013 also saw the end of the marking of natural objects, a process which had taken three years and was important both for improvement of visitor awareness and the preservation of the objects. In the course of the works costing EUR 175,452, a large portion of Estonian protection areas and single objects were marked – 2,671 new protection area signs were installed and 121 signs with out-dated information were removed.

In total, nine ERF projects operated under the RMK Nature Protection Department in 2013, and funding was received for four new projects.

NATURE PROTECTION WORKS

Renovation of infrastructure from EU funds

ERMK is developing the infrastructure needed for maintenance of semi-natural biotic communities, like roads, bridges, culverts, and exit roads, using funds from the European Regional Development Fund (ERF). Without these works. the area of semi-natural biotic communities to be maintained in protected areas could not be increased significantly. The support is also used for restoring bog edges damaged by draining, and abandoned peat fields.

The restoration works of the peat lands of Rannu and Viru bogs and the restoration of the natural

water regime of Hara swamp were completed in 2013. The aim of these activities was to guide these areas to the path of natural renewal so that peat moss could grow again and bind greenhouse gases, instead of producing carbon dioxide. The cost of the works was EUR 450.022. So far, little has been done in this field in Estonia.

Access to the maintained flooded meadows at Soomaa National Park was improved: reconstruction of the two roads cost EUR 202,833.

Restoration of Soomaa's terrains and the biotic

On-going nature protection works:

- Construction of the Kloostri bridge-regulator at Matsalu National Park
- Restoration of the natural water regime at Endla Nature Reserve
- Reconstruction of the Raba road at Soomaa National Park
- Improvement of accessibility to the flooded meadows at Alam-Pedja Nature Reserve
- Construction and reconstruction of the infrastructure necessary for maintaining a meadow at Matsalu National Park
- Restoration of the water regime and bog habitats at the border areas of Muraka marshland
- Establishment and reconstruction of the infrastructure necessary for management of flooded meadows at Soomaa National Park
- Reconstruction of Väljaotsa Road at Kärevere Nature Reserve

Cost of nature protection works



Maintaining species protection and biotic communities from own funds

During the year, RMK carried out nature protection works from its own funds in the amount of EUR 221,800 and on 103 objects.

Specific species protection works were carried out on 27 areas, the most important of them being:

- improvement of the condition of amphibian habitats and spawning water bodies. The larger works traditionally took place in Suursoo at Lääne County, Lavassaare, and Luitemaa nature reserves.
- improvement of the habitat condition of protected plant species. For example, the growth conditions of orchids were made more favourable in Kõrgessaare, Hiiumaa, and in Lääne-Viru County in Varangu and Ohepalu.

The other species protection works across Estonia were aimed at improvement of the habitat condition of several endangered and rare plant, amphibian, and lichen species.

The area of the restored and maintained biotic communities and valuable landscapes grew to 315 hectares during the year.

The larger works included:

- restoration and maintenance of the semi-natural biotic communities at Pirita River Valley Landscape Protection Area
- maintenance of natural grasslands at Otepää Nature Park
- management of Jussi heath at Põhja-Kõrvemaa Nature Reserve

 restoration of semi-natural biotic communities in Lääne and Lääne-Viru Counties.

In addition, RMK reconditioned the former Saru landfill at the Koiva-Mustjõe Landscape Protection Area; the works were funded by the European Union Cohesion Fund via the Environmental Investment Centre.

For protection of natterjacks

One of the important tasks started by RMK in 2013 was restoration of the coastal landscape of Harilaiu Peninsula at Vilsandi National Park. It is a unique undertaking in Estonia, with the hope being that the results will significantly improve the habitat conditions of a very rare and endangered species – the natterjack toad. 55 hectares of forest previously planted in Harilaiu was cut. The works are planned to be completed in 2014.

The natterjack toad is one of our smallest yet loudest amphibians, whose hallmark loud rattle was a common springtime sound in the coastal areas and on the islands in Western Estonia in the first half of the 20th century. The abundance of the species in Estonia has declined steadily; only 15 isolated populations remain.

Help from volunteers

Cooperation with the Estonian Fund for Nature continued. Nine one-day and ten several-day bees were held on state land, during which the habitats of protected species, semi-natural biotic communities and valuable landscapes were restored and maintained. A total of 253 people participated in the bees, contributing a total of more than 1,800 working hours to nature protection works.

More land rented out for maintenance

RMK rents out an increasing amount of land for maintenance of semi-natural biotic communities. In total, 14,509 hectares of land has been rented out to 237 partners, from which 6,815 hectares were given for rent in 2013. On 862 hectares of these lands, RMK assumed the obligation to carry out the cutting necessary to restore a semi-natural biotic community over the next three years.



Semi-natural biotic communities rented out during the year



THE YEAR IN NUMBERS

Number of visits to RMK recreational and protected areas

1.7 million

40

Recreational areas National parks Other nature reserves with a visiting infrastructure Information points Nature centres Nature houses Nature schools

Visitors

32

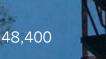
... at information points ... at Elistvere Animal Park ... at Sagadi Forest Museum

Participants in nature education programme

Cost of nature holiday and education



63,000 58,000 25,200



EUR 6.6 million

VISITING ORGANISATION AND NATURE EDUCATION

POSSIBILITIES FOR MOVING IN NATURE

RMK has:

2,000 km of hiking trails

2 branches of a hiking route crossing Estonia

309 covered camp fire sites

57 camping areas

28 forest huts

- 18 forest houses
- 3 off-road areas

Number of visits to RMK recreational and protected areas

2013	1,700,000
2012	1,600,000
2011	1,550,000
2010	1,570,000
2009	1,450,000

New branch of a hiking route

A new 627 km long southern branch was added to the hiking route crossing Estonia. The route, prepared with the help of Alar Sikk, an experienced alpinist and hiking guide, starts in Aegviidu, in Harju County, zigzags through eight counties, and ends in Ähijärve, in Võru County, at the Karula National Park Visitor Centre. The route can easily be combined with the 375 km long Oandu-Ikla hiking route that was completed in 2012.

In addition to connecting the existing recreational objects and trails, RMK also aimed to ensure when creating the southern branch that the route would introduce as many sites characteristic to the area as possible. This allows hikers to visit churches, museums, and other attractions and drop by village shops, tourism farms, and eateries. The route passes through several small settlements and will hopefully help to rejuvenate the local economy. The route also includes several record-holding sites in Estonia: the deepest lake, the highest peak, the thickest layer of peat, etc.

Renovation of hiking trails

Simultaneously with providing diverse recreational opportunities, RMK must also protect nature. Out of the renovation and construction works undertaken in 2013 due to the high visitor numbers, the most extensive took place in the area of Taevaskoja.

In the course of a six-month renovation of the nature trails of the sandstone outcrop, the trails, barriers, stairs, and two arch bridges were

renewed. The works cost EUR 227.000 and the support of the European Regional Development Fund was mediated by the Environmental Investment Centre. From its own funds. RMK built an information point for the area and renewed information boards, benches, and recreational areas. Part of the trail is now accessible to visitors with small children and persons with mobility disabilities.

On average, 32,000 people visit Taevaskoja every year. Other popular RMK nature trails include the

The trails at Keila-Joa and Oru parks were fixed up.

What else happened?

- in Tallinn, enabling one to view, on a large touchscreen, the possibilities for moving around in nature and take a look at the forest works to be done in the state forest in the upcoming years.
- During the year of cultural heritage, RMK organised summer theatre picnics in Aegviidu and Pähni in Võru County. More than 1,400 people attended the events that combined a nature hike, theatre, and a picnic.
- on the topic "Milleks meile mets?" ("Why do we need a forest?").
- in English.

Keila-Joa park trail. Viitna nature study trail. Rannametsa-Tolkuse nature study trail, the Viru bog study trail, and the Vanaiõe valley study trail.

In addition to the above, the following were renovated or rebuilt in 2013:

trails for disabled people, along the Beaver Trail and Riisa study trail in Soomaa National Park

Ingatsi and Läti observation towers

boardwalks and the observation tower at Viru bog, at Lahemaa National Park

Simisalu-Matsimäe and Tammsaare nature trails in Southern Kõrvemaa

Uuejärve, Paukjärve, Jussi and Paunküla hiking trails in Northern Kõrvemaa

Keskranna recreational area on Saaremaa

An innovative information point was opened in RMK's new main building.

Within the course of a campaign that introduced the diverse amenities offered by the forest, a book, outdoor advertisements, and video clips were completed

• The webpage loodusegakoos.ee and the RMK Mobile App are now also available

NATURE EDUCATION

Nature programmes and their participants	2009	2010	2011	2012	2013
Nature programmes organised	1,868	1,926	2,449	2,993	2,953
Participants in programmes	39,395	42,231	50,776	59,931	48,433

Knowledge from the forest school

During the year, RMK carried out 2,953 educational programmes for 48,433 learners in nature centres and the Sagadi Nature School.

The most popular competition was the forest quiz, with a record-breaking number of participating classes with 8.853 students. More than a thousand works were also submitted to the forest postcard competition for schoolchildren, and

special postcard sets were printed of the best works selected by popular vote.

RMK's nature education headquarters are nature centres and nature houses all over Estonia. In the course of infrastructure improvement works at nature centres, funded by the European Regional Development Fund, Viimsi, Pähni and Nõva nature centres, and the Simisalu nature house, were completed in 2013.



SAGADI **FOREST CENTRE**



Family studies and a bug hotel

The biggest hit at the Sagadi Forest Centre was a series of family events that took place once a month on Sundays, called "Lahemaa looduse kool" ("Lahemaa Nature School"). School days started with pancakes and continued with acquiring knowledge about nature, both in the classroom and on a forest trip. The new format was embraced quickly, and the series will continue in 2014. For the first time, the Sagadi Nature School was also kept open in the summer, so that families with children and other visitors could add it to their holiday plans.

The popularity of Sagadi manor as a wedding venue increased, also partly thanks to the sample wedding held there in May. All weekends for this summer

The Wood Days, which have become so dear to many people, were held for the tenth time; July was the month of night museums. Two new exhibitions were opened – one of them dedicated to the bird of the year for 2013, the partridge, and the second to the Christmas tree.

have already been booked, and requests for 2015 are already being made.

The recurrent theme at the Sagadi Forest Centre in 2014 is insects. In addition to lectures and exhibitions dedicated to them, there are also plans to open an insect hotel.

RMK Sagadi Forest Centre is home to a forest museum, nature school, a hotel, and a restaurant.

ELISTVERE ANIMAL PARK

Visiting record

During the year, 58,005 people visited Elistvere Animal Park, which is the largest number since 2008 when the Animal Park was first incorporated into RMK.

As far as births were concerned, last year was somewhat poorer than previous years, which meant that we received even more joy from the three roe deer calves, a fallow deer calf, and the unexpected little bison born at the end of autumn. Under

rehabilitation, the Animal Park received the roe deer made famous by TV reporter Heiki Valner, with its love for borsch soup and fresh fish, as well as a little fox that had been attacked by dachshunds, and a lynx abandoned by its mother.

RMK Elistvere Animal Park, located in Jõgeva County, is home to 54 quadrupeds, 45 rodents, and three birds.



CHRISTMAS TREES

Positioned Christmas trees

In 2013, 1,100 more Christmas trees were brought home from the state forest than in 2012. Regardless of the lack of snowy winter weather, the trip to bring a tree home was taken on 8,700 occasions.

It was made more convenient by the RMK Mobile App, which enabled users to find a state forest with no trouble, identify their location, and pay for a suitable Christmas tree. Seventy per cent of the trees were purchased using mobile payment. RMK donated and delivered 80 Christmas trees to orphanages.

2009

RMK provides the opportunity to bring home your own Christmas tree from the state forest, to strengthen the connection of people with nature and old Estonian traditions. Christmas trees can only be cut from places where they have no hope of growing to maturity: along the edges of roads and ditches, underneath power lines and in old forests.

Christmas trees from the state forest

8,700	
7,600	
7,000	
4,600	
5,000	

THE YEAR IN NUMBERS

Supported applied research projects
2008–2013
incl. added during the year
incl. in process
Applied research project budget 2008–2014
of which allocated in 2013
Forestry scholarships

EUR 567,000

EUR 9,000

11



RESEARCH WORK

APPLIED RESEARCH PROJECTS

Capercaillie, global warming, and clear-cutting

The largest of the new research projects funded by RMK is focused on the protection of capercaillies: the other two are studying the impacts of global warming and clear-cutting. EUR 567,000 was allocated for carrying out these three applied research projects over the next three years.

RMK began supporting targeted research activity in 2008, when it called for a research council consisting of top scientists and started funding applied research that supports forestry.

Multipurpose survey on the aspects determining the quality of habitat of capercaillies

The capercaillie is a forest bird with a large habitat requirement and a shrinking population. The measures taken in its protection have not provided results so far. The aim of the project is to compare the use of habitat by capercaillies and the habitat restricting factors in a natural and maintained forest landscape. The complex research consists of three parts – a telemetrics study describes the use of habitat, a predator study determines the presence of capercaillies in the menu of predators, and a restoration study assesses whether and how guickly is it possible to turn a managed forest into a more suitable habitat for capercaillies by using cutting and draining.

Carbon and nitrogen circulation of forests with an amended water regime

More than one third of Estonian forests have been drained, but we do not know whether the forests, which grow faster thanks to draining, help to prevent global warming or act as its contributors. Researchers are studying whether drained forests bind more greenhouse gases than they produce. The factors that impact the balance and dynamics of the greenhouse gases of drained forests are also determined.

The project is carried out by the specialists of the University of Tartu, the Estonian University of Life Sciences, and the Estonian Ornithological Society.

The project manager is Asko Lõhmus from the University of Tartu.

The cost is EUR 308.500.

The project is carried out by the specialists of the University of Tartu and the Estonian University of Life Sciences.

The project manager is **Ülo Mander** from the University of Tartu.

The cost is EUR 160.000.

Methodology for assessing the impact of clear-cutting and prevention of conflicts

As a result of the research, a methodology will be developed for RMK for assessing the impact of clear cutting and prevention of the potential conflicts on a landscape level, taking into consideration the social, economic, and ecological aspects.

Other on-going projects:

- Finding the equations suitable under Estonian conditions for determining the volume of growing forest and forest material.
- Forest conservation problems related to forest cultivation in Estonian forestry and avoiding them with environmentally friendly measures.
- Ecologic economic analysis of shelterwood cutting and establishment of a network of sample permanent protected areas.
- Forestry-related aspects of collecting spruce stumps and assessment of the accompanying environmental impact.



The project is carried out by the specialists of the University of Tartu and the Estonian University of Life Sciences.

The project manager is Kalev Sepp from the Estonian University of Life Sciences.

The cost is EUR 98.500.

USE OF THE RESEARCH RESULTS

New knowledge to practice

RMK has already implemented the results of research projects in, for example, reconstruction of land improvement systems, using different methods to increase the value of ditches for amphibians, birds, and fish. The research projects have also provided valuable information on what is the volume of cutting waste that could be used without having a significant impact on the forest biota.

The research project on shelterwood cutting that is soon to be completed should give us better knowledge for nature-friendly forest management in places where clear-cutting is not recommended for some reason. The research on the environmental impact of collecting spruce stumps, and their energetic value, is also promising in the sense of interesting and useful information.

Escaping from an ecological trap

An RMK-supported research project on the impact of forest drainage on potentially endangered biota is a good example of how one research project brings about another one, and how the discoveries of researchers can change the work of forest managers.

One of the first research projects that RMK supported was an applied research project in 2008–2011, on the impact of forest drainage on the biota related to forest water bodies and on the groups of species that are considered vulnerable to long-term drainage. The results showed that ditches as artificial watercourses may be usable for the biota, but their quality is low compared to natural water bodies. At the same time, the research provided recommendations on how to reconstruct ditches to make them more suitable for the biota.

As an expansion of this research, Maarja Vaikre, a doctoral student at the University of Tartu, has decided to conduct more specific research on methods for saving invertebrates and amphibians from an ecological trap. It is a situation in which invertebrates and amphibians cannot complete their development phases due to the rapid drying of natural small water bodies and ditches because of drainage.

In the course of ditch reconstruction, different shaped expansions and puddles are planned to be made near the ditches. It will then be observed which are the best types, shapes, and sizes of water bodies for invertebrate and amphibians. This knowledge can later be used on reconstruction of drainage networks. The test sites will be Ropka and Valgma forest drainage objects, in Tartu County. The main focus will be on the moor frog and the common frog, which are quite widespread in the forest landscape and easy to find in water bodies. All 11 species of Estonian amphibians are under protection.

SCHOLARSHIPS

For support of the best

In order to popularise forestry education, RMK gave out EUR 8,300 in study scholarships.

The Toomas Ehrpais scholarship, in the amount of EUR 1,917, was awarded to Kairi Laak-Randoja.

The Heino Teder scholarship for master's students at the University of Life Sciences, in the amount of EUR 3,200, was awarded to Gunnar Morozov and Sigrid Strantsov, for their study results and social activity.

The Endel Laasi scholarship for doctoral students at the University of Life Sciences was not awarded in 2013.

mark of Lif



Award for Master's thesis

The EUR 700 award for a Master's thesis on forestry was given by RMK to Teet Paju. The master's student at the University of Life Sciences researched the extent to which forest management impacts the abundance of capercaillies and whether it is connected to cutting or non-management of the forest.

The claims presented in Teet Paju's Master's thesis, that the decrease in the playgrounds of capercaillies is not directly linked with cuttings, were surprising. The Master's thesis was given the highest mark by the evaluation committee at the University of Life Sciences.

It was the 13^{th} time that RMK gave out the EUR 700 award for the best Master's thesis.



BALANCE SHEET

(in EUR)

ASSETS	31.12.2013	31.12.2012
Current assets		
Cash	17,032,435	20,485,500
Receivables and prepayments	12,392,905	9,803,585
Inventories	16,369,110	15,948,133
Biological assets	26,114,084	26,114,084
Total current assets	71,908,534	72,351,302
Fixed assets		
Investments in subsidiaries	2,241,151	1,980,235
Tangible assets	414,998,603	389,618,113
Intangible fixed assets	920,659	855,559
Biological assets	741,847,889	741,847,889
Total fixed assets	1,160,008,302	1,134,301,796
TOTAL ASSETS	1,231,916,836	1,206,653,098

LIABILITIES AND EQUITY CAPITAL	31.12.2013	31.12.2012
Liabilities		
Short-term liabilities		
Appropriations	84,057	75,815
Debts and prepayments	13,814,836	18,855,889
Total short-term liabilities	13,898,893	18,931,704
Long-term liabilities		
Appropriations	475,333	456,233
Total long·term liabilities	475,333	456,233
TOTAL LIABILITIES	14,374,226	19,387,937
Equity capital		
State capital	1,101,822,038	1,087,179,793
Retained profit	84,245,317	81,900,658
Profit for the financial year	31,475,255	18,184,710
TOTAL EQUITY CAPITAL	1,217,542,610	1,187,265,161
TOTAL LIABILITIES AND EQUITY CAPITAL	1,231,916,836	1,206,653,098

INCOME STATEMENT

(in EUR)

	2013	2012
Return on sales	150,731,408	135,750,681
Other operating revenue	4,149,281	6,412,874
Change in the inventory of finished and unfinished products	417,997	402,797
Deferred costs on preparation of fixed assets for its own purpose	104,672	21,045
Goods, raw materials, materials and services	-82,291,555	-77,129,440
Miscellaneous operating expenses	-10,969,338	-11,118,487
Labour costs	-20,181,922	-20,814,872
Depreciation and impairment of fixed assets	-6,511,434	-6,196,685
Other operating expenses	-38,165	-81,997
Operating profit	35,410,944	27,245,916
Financial income from subsidiaries	262,967	117,507
Other financial income and expenditure	11,445	443,965
Profit before income tax	35,685,356	27,807,388
Income tax	-4,210,101	-9,622,678
Profit for the financial year	31,475,255	18,184,710

AUDITOR'S REPORT

Deloitte.

Translation from Estonian original

INDEPENDENT CERTIFIED AUDITOR'S REPORT

To the Supervisory Board of Riigimetsa Majandamise Keskus:

We have audited the financial statements of Riigimetsa Majandamise Keskus (hereafter "RMK") which comprise the balance sheet as at 31 December 2013, the statement of income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory notes. We conducted our audit in accordance with International Standards on Auditing. In our independent certified auditor's report dated 18 March 2014 we expressed an opinion that the financial statements, from which the accompanying summarized statements presented on pp. 48-50 were derived, present fairly, in all material aspects, the financial positions of RMK as at 31 December 2013, and its financial performance and its cash flows for the year then ended in accordance with General Guidance of the Public Sector Accounting, Estonian Accounting Act and the guidelines issued by the Estonian Accounting Standards Board.

In our opinion, the accompanying summarized financial statements are consistent, in all material respects, with the financial statements from which they were derived.

For a better understanding of RMK's financial position and the results of its operations for the period and of the scope of our audit, the summarized financial statements should be read in conjunction with the financial statements from which the summarized financial statements were derived and our independent certified auditor's report thereon.

10 April 2014

Ilun

Erki Usin

Veiko Hintsov Public Sector Certified Auditor, No. 328 AS Deloitte Audit Eesti Licence No. 27

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Download to your mobile the RMK smart phone app for hikers. Available in Estonian, English and Russian for Android, iPhone and Windows phones.

