

NATURE MONUMENTS IN THE SZAMOTUŁY COUNTY (WIELKOPOLSKIE PROVINCE)

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Abstract. The paper presents results of the first survey of nature monuments conducted after WWII in seven communes of the Szamotuły county: Duszniki, Kaźmierz, Obrzycko, Ostroróg, Pniewy, Szamotuły and Wronki. A total of 114 nature monuments were inventoried – single trees account for 76.3% of all monuments, while clusters of trees – 20.2%, respectively. A locality of *Osmunda regalis*, a cluster of *Pinus mugo* as well as two erratics are also monuments. A total of 384 trees of 25 species were inventoried. In case of single trees considered nature monuments the most numerous group is composed of English oaks (44 trees – 50.6%), while among tree clusters Scots pines predominate (201 trees – 67.7 %). The biggest number of monuments is found in state forests (57.9%) and former manor parks (21.9%). Plaques of NATURE MONUMENT are placed on 54% trees ranked as monuments and 60.9% tree clusters, while only every eighth monument tree cluster bears the appropriate information plaque. Such a plaque was also placed on one erratic. The most impressive tree in the analysed county is a London plane from Pozarów, with a circumference of 7.15 m.

Key words: nature monument, the Szamotuły country, nature protection

INTRODUCTION

Nature monuments are important links in the functioning of the nature protection system. The conservation function it serves, makes it possible to maintain genetic diversity and the presence of aged, impressive trees with accompanying vegetation may supply much information on the production potential of habitats and natural development trends. An old of a tree may also indicate a good adaptation of a species to existing habitat conditions. According to Ruciński [1998], nature monument protection supplements and promotes conservation of genetic diversity, cultural and geological heritage, unique characteristics of landscape and it strengthens species conservation. Thus objects considered nature monuments should be rare, very old, have impressive dimensions, a peculiar form or other characteristics distinguishing a given specimen among repre-

sentatives of a given species or other similar objects. Monuments of inanimate nature are a unique manifestation of the genesis of a given geological, morphological or physiographic unit. The basic criteria for the selection of inanimate nature objects deserving protection include the unique character of the object, its didactic and esthetic value, as well as tourist interest.

AREA, MATERIAL AND METHODS

The survey of nature monuments was conducted in the vegetation season of 2007 in seven communes of the Szamotuły county: Duszniki, Kaźmierz, Obrzycko, Ostroróg, Pniewy, Szamotuły and Wrónki (Fig. 1).

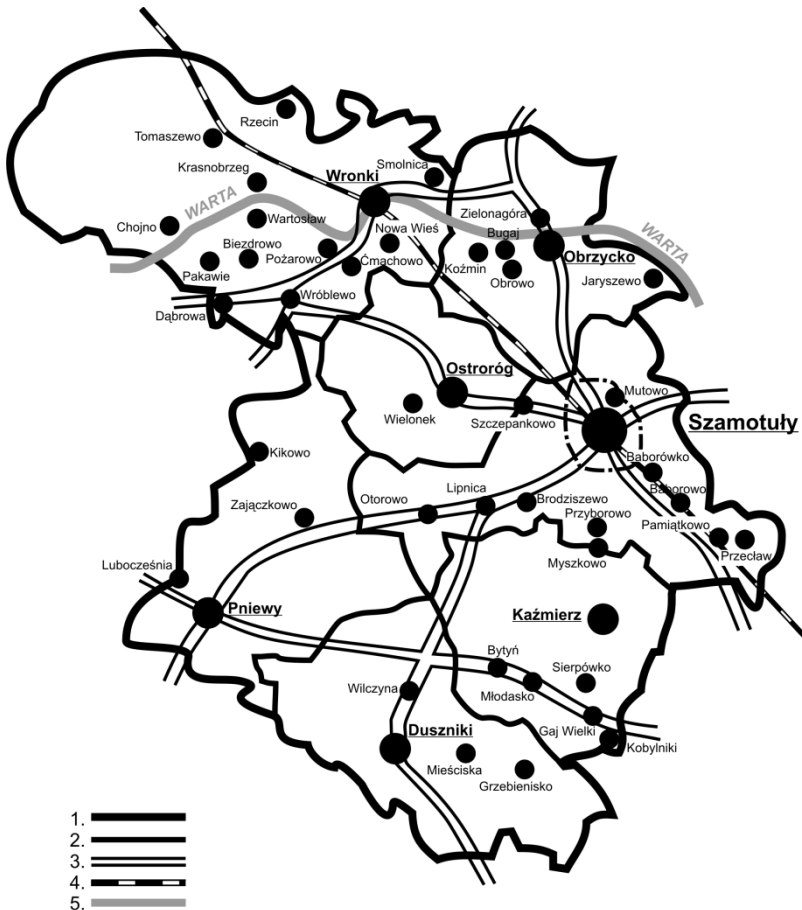


Fig. 1. The location of towns with nature monuments: 1 – county boundaries, 2 – commune boundaries, 3 – roads, 4 – railway line, 5 – water bodies

Rys. 1. Rozmieszczenie miejscowości z pomnikami przyrody: 1 – granice powiatu szamotulskiego, 2 – granice gmin powiatu szamotulskiego, 3 – drogi, 4 – linia kolejowa, 5 – wody

Prior to the initiation of field studies necessary information on nature monuments in that area was collected at the archives of the Provincial Nature Conservation Officer in Poznań, from the branch office of the Provincial Office in Piła and from the Commune Offices and Forest Divisions. These data were mainly in the form of Applications for the establishment of a nature monument or Decisions concerning the establishment of a protection form.

Single tree ranked as monuments, as well as clusters of up to 30 trees were characterized in detail: measurements were taken of their total height, circumference at a height of 1.3 m, and in case of a tree damaged at that height measurements were taken above it. Circumferences of trees growing on a slope were measured from the higher side of the slope. In case of more numerous clusters trees with extreme dimensions were measured. Moreover, health condition of the stem and crown was determined using a 5-point scale based on the guidelines presented by Kasprzak [2005]:

- 5 (very good health condition) – completely healthy trees, with no dry branches, no damage to the stem or present pests
- 4 (good) – trees with dead, dry twigs, particularly at the top, presence of plant and animal pests, slight damage to bark
- 3 (medium) – trees, which have 50% dead crown as well as bolt or stem, trees infested to a considerable degree by pests
- 2 (bad) – trees having 70% dead crown and bolt or stem, considerable losses in wood tissue
- 1 (very bad) – trees having over 70% dead crown and bolt or stem, with numerous hollows, in which less than 25% stem circumference performs the conducting function, as well as dead trees.

In case of erratics their circumferences were measured at their widest parts and their height was measured. The depth to which erratics were sunk in the ground and the degree to which they were overgrown with lichens and mosses were also determined.

Nomenclature of plants was adopted after Mirek et al. [2002].

RESULTS

Among 114 inventoried nature monuments single tree predominate, amounting to 76.3% all monuments, followed by clusters of trees at 20.2%. Other monuments include a locality of a protected royal fern *Osmunda regalis*, a cluster of *Pinus mugo* as well as two erratics. Among 87 single trees – nature monuments, the biggest number, i.e. 25, are found in the Pniewy commune. In the Wronki commune there is the biggest number, i.e. 12, of tree clusters. Erratics were inventoried in the communes of Obrzycko and Wronki. The lowest numbers of nature monuments were established in the communes of Duszniki and Ostroróg.

A total of 384 trees of 25 species were inventoried. In case of single trees classified as nature monuments the most numerous groups comprise English oaks (44 trees – 50.6%), small-leaved limes (8 trees – 9.2%) and common elms (6 trees – 5.7%). Among tree clusters Scots pines are in the vast majority (201 trees – 67.7%), followed by English oaks (26 trees – 8.7%).

The most impressive trees in the analysed area county (among all categories of monuments) include (Tables 1 and 2):

Table 1. List of trees – nature monuments in the Szamotuły County
Tabela 1. Zestawienie drzew uznanych pomnikami przyrody w powiecie szamotulskim

Number according to provincial register Numer według rejestru wojewódzkiego	Protected object/name Przedmiot ochrony/nazwa	Location; property owner Lokalizacja; właściciel terenu	Year of establishment Rok ustanowienia	Dimensions Wymiary			Health state Stan zdrowotny	
				girth at the year of establishment obwód pnia w roku ustanowienia m	girth obwód pnia m	height wysokość m	of stem pnia	of crown korony
1	2	3	4	5	6	7	8	9
Duszniki commune – Gmina Duszniki								
310	<i>Tilia cordata</i>	Wilczyna, 76/1; owner: the Roman Catholic Parish in Wilczyna Wilczyna, 76/1; właściciel: parafia rzymskokatolicka w Wilczynie	1975	3.60	4.40	21.5	4	4
1214/01	<i>Sorbus torminalis</i>	Mieściska, Bytyń Forest Range, compartment 300 c; owner: Pniewy Forest Division Mieściska, 1-ctwo Bytyń, oddz. 300 c; właściciel: Nadleśnictwo Pniewy	2001	1.38	1.64	23.0	4	4
1215/01	<i>Tilia cordata</i>	as above – jak wyżej	2001	3.70	3.98	28.0	4	4
1216/01	<i>Fagus sylvatica</i>	as above – jak wyżej	2001	3.55	3.67	30.0	4	4
Kaźmierz commune – Gmina Kaźmierz								
72	<i>Sorbus torminalis</i>	Bytyń, Bytyń Forest Range, compartment 298 a; owner: Pniewy Forest Division Bytyń, 1-ctwo Bytyń, oddz. 298 a; właściciel: Nadleśnictwo Pniewy	1957	0.48	0.98	14.0	3	3
104	<i>Quercus robur</i>	Bytyń, Bytyń Forest Range, compartment 297 g; owner: Pniewy Forest Division Bytyń, 1-ctwo Bytyń, oddz. 297 g; właściciel: Nadleśnictwo Pniewy	1958	3.70	4.24	27.0	4	3
105	<i>Quercus robur</i>	as above – jak wyżej	1958	3.40	4.20	28.0	3	3
106	<i>Quercus robur</i>	as above – jak wyżej	1958	3.30	3.77	27.0	3	3
107	<i>Quercus robur</i>	as above – jak wyżej	1958	3.30	3.70	25.0	3	3
108	<i>Quercus robur</i>	as above – jak wyżej	1958	2.90	3.09	26.0	3	3
109	<i>Quercus robur</i>	as above – jak wyżej	1958	2.20	3.07	26.0	1	1
195	<i>Quercus robur</i>	Sierpówko, Kaźmierz Forest Range, compartment 275 a; owner: Nadleśnictwo Pniewy Sierpówko, 1-ctwo Kaźmierz, oddz. 275 a; właściciel: Nadleśnictwo Pniewy	1965	4.20	5.23	30.0	2	4
196	<i>Quercus robur</i>	Gaj Wielki, Kaźmierz Forest Range, compartment 274 a; owner: Pniewy Forest Division Gaj Wielki, 1-ctwo Kaźmierz, oddz. 274 a; właściciel: Nadleśnictwo Pniewy	1965	3.30	4.26	30.0	4	4

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9
197	<i>Quercus robur</i>	as above – jak wyżej	1965	3.70	4.60	29.0	5	4
198	<i>Quercus robur</i>	Grzebienisko, Bytyń Forest Range, compartment 331 d; owner: Mr Chwalisz Grzebienisko, l-ctwo Bytyń, oddz. 331 d; właściciel: p. Chwalisz	1965	4.20	5.20	20.0	2	4
409	<i>Aesculus hippocastanum</i>	Bytyń, 117/42; owner: The Nissenbaum Family Foundation Bytyń, 117/42; właściciel: Fundacja Rodziny Nissenbaumów	1984	3.52	4.98	27.0	4	4
410	<i>Aesculus hippocastanum</i>	as above – jak wyżej	1984	4.40	5.30	24.0	3	3
451	<i>Quercus robur</i>	Sierpówko, Kaźmierz Forest Range, compartment 275 a; owner: Pniewy Forest Division Sierpówko, l-ctwo Kaźmierz, oddz. 275 a; właściciel: Nadleśnictwo Pniewy	1986	4.70	4.97	19.0	4	3
453	<i>Quercus robur</i>	Nowa Wieś, 83; owner: County Road Authority in Szamotuły Nowa Wieś, 83; właściciel: Zarząd Dróg Powiatowych w Szamotułach	1986	5.15	5.38	18.0	2	1
1217/01	<i>Quercus robur</i>	Młodasko, Kaźmierz Forest Range, compartment 267 g; owner: Pniewy Forest Division Młodasko, l-ctwo Kaźmierz, oddz. 267 g; właściciel: Nadleśnictwo Pniewy	2001	4.05	4.18	27.0	4	4
1218/01	<i>Quercus robur</i>	as above – jak wyżej	2001	3.70	3.88	29.0	5	5
1219/01	<i>Quercus robur</i>	as above – jak wyżej	2001	4.02	4.00	28.5	5	5
1220/01	<i>Sorbus torminalis</i>	Mieściska, Bytyń Forest Range, compartment 300 d; owner: Pniewy Forest Division Mieściska, l-ctwo Bytyń, oddz. 300 d; właściciel: Nadleśnictwo Pniewy	2001	1.05	1.10	19.0	4	4
Obrzycko commune – Gmina Obrzycko								
76	<i>Quercus robur</i>	Obrzycko, Daniele Forest Range, compartment 1034 r; owner: Oborniki Forest Division Obrzycko, l-ctwo Daniele, oddz. 1034 r; właściciel: Nadleśnictwo Oborniki	1957	4.70	4.70	24.0	1	1
77	<i>Quercus robur</i>	as above – jak wyżej	1957	4.00	5.98	29.0	3	3
78	<i>Quercus robur</i>	as above – jak wyżej	1957	4.05	4.40	21.0	3	2
80	<i>Quercus robur</i>	as above – jak wyżej	1957	3.85	5.50	29.0	2	2

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9
454	<i>Pinus sylvestris</i>	Bugaj, Daniele Forest Range, compartment 1015 g; owner: Oborniki Forest Division Bugaj, l-ctwo Daniele, oddz. 1015 g; właściciel: Nadleśnictwo Oborniki	1986	2.90	3.18	23.0	4	3
455	<i>Quercus robur</i>	Bugaj, 8; owner: Agricultural Property Agency of the State Treasury Bugaj, 8; właściciel: Agencja Własności Rolnej Skarbu Państwa	1986	5.25	5.80	30.0	4	3
486	<i>Quercus robur</i>	Zielonagóra, 16/1; owner: Artistic and Leisure Centre of the Adam Mickiewicz University Zielonagóra, 16/1; właściciel: Dom Pracy Twórczej i Wypoczynku UAM	1986	4.14	4.80	28.0	4	4
487	<i>Tilia platyphyllos</i>	as above – jak wyżej	1986	3.85	4.30	26.0	3	4
488	<i>Tilia cordata</i>	Obrzycko, 260; owner: the Obrzycko Town Office Obrzycko, 260; właściciel: Urząd Miasta Obrzycko	1986	3.30	3.00	16.0	2	3
489	<i>Acer pseudoplatanus</i>	as above – jak wyżej	1986	2.80	2.98	26.0	3	4
490	<i>Quercus robur</i>	Zielonagóra, Obrzycko Forest Range, compartment 985 o; owner: Oborniki Forest Division Zielonagóra, l-ctwo Obrzycko, oddz. 985 o; właściciel: Nadleśnictwo Oborniki	1986	3.55	3.85	27.0	4	4
491	<i>Quercus robur</i>	as above – jak wyżej	1986	3.90	4.50	28.5	5	5
688	<i>Pinus sylvestris</i> „Krzywa sosna”	Jaroszewo, Sycyn Forest Range, compartment 1114 d; owner: Oborniki Forest Division Jaroszewo, l-ctwo Sycyn, oddz. 1114 d; właściciel: Nadleśnictwo Oborniki	1991	2.70	2.50	7.0	1	1
No. in commune register XVI/65/96 Nr według rejestru gminnego XVI/65/96	<i>Pinus sylvestris</i>	Koźmin, Daniele Forest Range, compartment 1023 d; owner: Oborniki Forest Division Koźmin, l-ctwo Daniele, oddz. 1023 d; właściciel: Nadleśnictwo Oborniki	1996	–	2.91	23.0	4	4
Ostroróg commune – Gmina Ostroróg								
395	<i>Larix decidua</i> subsp. <i>polonica</i>	Wielonek, Wielonek Forest Range, compartment 101 h; owner: Pniewy Forest Division Wielonek, l-ctwo Wielonek, oddz. 101 h; właściciel: Nadleśnictwo Pniewy	1981	1.50	1.90	27.0	4	4

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9
518	<i>Tilia cordata</i>	Szczepankowo, 226; owner: Maria Grabowska- -Dutkiewicz Szczepankowo, 226; właściciel: Maria Grabowska-Dutkiewicz	1986	3.34	3.70	25.0	4	4
Pniewy commune – Gmina Pniewy								
509	<i>Ulmus glabra</i>	Kikowo, 39/1; owner: Włodzimierz Ryszczuk Kikowo, 39/1; właściciel: Włodzimierz Ryszczuk	1986	4.08	4.30	26.5	4	4
510	<i>Aesculus hippocastanum</i>	as above – jak wyżej	1986	3.00	3.20	24.0	3	4
511	<i>Taxus baccata</i>	as above – jak wyżej	1986	3.36	3.70	10.0	3	4
512	<i>Picea abies</i>	Zajączkowo, 90/5; owner: Training and Leisure Centre of the Board of Education – Provincial Office in Poznań Zajączkowo, 90/5; właściciel: Ośrodek Szkoleniowo-Wypoczyn- kowy Kuratorium Oświaty i Wychowania – Urząd Wojewódzki w Poznaniu	1986	3.10	3.25	28.0	3	2
513	<i>Tilia cordata</i>	as above – jak wyżej	1986	3.70	4.20	28.5	4	4
514	<i>Tilia cordata</i>	as above – jak wyżej	1986	4.40	4.85	30.0	4	4
1147/00	<i>Quercus robur</i>	Dąbrowa, Dąbrowa Forest Range, compartment 110 l; owner: Pniewy Forest Division Dąbrowa, l-ctwo Dąbrowa, oddz. 110 l; właściciel: Nadleśnictwo Pniewy	2000	3.34	3.55	30.0	4	3
1148/00	<i>Quercus robur</i>	Dąbrowa, Dąbrowa Forest Range, compartment 111 j; owner: Pniewy Forest Division Dąbrowa, l-ctwo Dąbrowa, oddz. 111 j; właściciel: Nadleśnictwo Pniewy	2000	3.11	3.25	29.0	4	4
1149/00	<i>Quercus robur</i>	as above – jak wyżej	2000	3.09	3.11	31.0	4	4
1150/00	<i>Quercus robur</i>	as above – jak wyżej	2000	3.50	3.37	30.0	4	4
1151/00	<i>Quercus robur</i>	Dąbrowa, Dąbrowa Forest Range, compartment 110 l; owner: Pniewy Forest Division Dąbrowa, l-ctwo Dąbrowa, oddz. 110 l; właściciel: Nadleśnictwo Pniewy	2000	3.88	4.10	30.0	4	3
1152/00	<i>Quercus robur</i>	as above	2000	2.98	3.12	30.0	4	3
1153/00	<i>Quercus robur</i>	as above	2000	3.84	4.07	31.0	4	4

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9
1154/00	<i>Quercus robur</i>	Dąbrowa, Dąbrowa Forest Range, compartment 232 c; owner: Pniewy Forest Division Dąbrowa, 1-ctwo Dąbrowa, oddz. 232 c; właściciel: Nadleśnictwo Pniewy	2000	3.09	3.29	25.0	4	4
1155/00	<i>Quercus robur</i>	Dąbrowa, Dąbrowa Forest Range, compartment 110 l; owner: Pniewy Forest Division Dąbrowa, 1-ctwo Dąbrowa, oddz. 110 l; właściciel: Nadleśnictwo Pniewy	2000	3.60	3.75	29.0	4	4
1156/00	<i>Quercus robur</i>	as above – jak wyżej	2000	3.19	3.43	30.0	4	4
1157/00	<i>Quercus robur</i>	Dąbrowa, Dąbrowa Forest Range, compartment 239 a; owner: Pniewy Forest Division Dąbrowa, 1-ctwo Dąbrowa, oddz. 239 a; właściciel: Nadleśnictwo Pniewy	2000	3.05	2.62	24.0	4	4
1159/00	<i>Acer platanoides</i>	Dąbrowa, Dąbrowa Forest Range, compartment 232 c; owner: Pniewy Forest Division Dąbrowa, 1-ctwo Dąbrowa, oddz. 232 c; właściciel: Nadleśnictwo Pniewy	2000	3.32	3.52	24.0	3	4
1160/00	<i>Tilia cordata</i>	Dąbrowa, Dąbrowa Forest Range, compartment 111 j; owner: Pniewy Forest Division Dąbrowa, 1-ctwo Dąbrowa, oddz. 111 j; właściciel: Nadleśnictwo Pniewy	2000	4.70	5.00	25.0	2	4
1162/00	<i>Ulmus minor</i>	Dąbrowa, Dąbrowa Forest Range, compartment 239 a; owner: Pniewy Forest Division Dąbrowa, 1-ctwo Dąbrowa, oddz. 239 a; właściciel: Nadleśnictwo Pniewy	2000	2.62	–	–	1	1
					Tree broken at a height of 0.8 m Drzewo złamane na wysokości 0,8 m			
1164/00	<i>Ulmus minor</i>	as above – jak wyżej	2000	3.33	3.47	25.0	4	4
1246/01	<i>Ulmus minor</i>	Luboczesnica, Dąbrowa Forest Range, compartment 97 d; owner: Pniewy Forest Division Luboczesnica, 1-ctwo Dąbrowa, oddz. 97 d; właściciel: Nadleśnictwo Pniewy	2001	3.41	3.48	30.0	4	4
1247/01	<i>Ulmus minor</i>	as above – jak wyżej	2001	3.31	3.00	29.0	4	4
1248/01	<i>Ulmus minor</i>	as above – jak wyżej	2001	2.74	2.52	27.0	4	4
1249/01	<i>Ulmus minor</i>	as above – jak wyżej	2001	3.33	3.35	12.0	1	1
Szamotuly commune – Gmina Szamotuly								
110	<i>Taxus baccata</i>	Brodziszewo, 106/5; owner: Jerzy Korpik Brodziszewo, 106/5; właściciel: Jerzy Korpik	1958	1.05, 0.60, 0.87	1.00, 0.70, 0.90	4.5	3	3

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9
111	<i>Quercus robur</i>	Brodziszewo, 110/1; owner: the Szamotuły Town and Commune Office Brodziszewo, 110/1; właściciel: Urząd Miasta i Gminy Szamotuły	1958	5.15	6.05	23.0	4	4
199	<i>Quercus robur</i>	Przyborowo, Kaźmier Forest Range, compartment 38 k; owner: Pniewy Forest Division Przyborowo, 1-ctwo Kaźmierz, oddz. 38 k; właściciel: Nadleśnictwo Pniewy	1965	5.48	6.27	27.0	4	4
309	<i>Robinia pseudoacacia</i>	Mutowo, 70/2; owner: Agricultural Property Agency of the State Treasury in Poznań, lessee GPU Mutowo Mutowo, 70/2; właściciel: Agencja Własności Rolnej Skarbu Państwa w Poznaniu, dzierżawca GPU Mutowo	1975	–	4.40	10.0	1	2
396	<i>Pinus sylvestris</i>	Lipnica, 17/17; owner: the State Treasury/Przedsiębiorstwo Rolniczo-Hodowlane Gałopol Sp. z o.o. w Gałowie Lipnica, 17/17; właściciel: Skarb Państwa/Przedsiębiorstwo Rolniczo-Hodowlane Gałopol Sp. z o.o. w Gałowie	1981	2.94	3.03	16.5	3	2
399	<i>Quercus robur</i>	as above – jak wyżej	1981	3.60	4.30	19.0	3	4
570	<i>Fraxinus excelsior</i>	Myszkowo, 41; owner: Sebastian Żółtowski Myszkowo, 41; właściciel: Sebastian Żółtowski	1988	5.02	5.30	26.5	3	4
571	<i>Fagus sylvatica</i>	as above – jak wyżej	1988	3.66	4.05	31.5	3	4
572	<i>Pinus strobus</i>	Baborówko, 41/34; owner: the State Treasury/Krystyna and Henryk Świącicy „Palace and Horse Riding Centre Baborówko” Baborówko, 41/34; właściciel: Skarb Państwa/Krystyna i Henryk Świącicy „Pałac i Ośrodek Jeździecki Baborówko”	1988	2.30	2.40	31.0	4	4
573	<i>Quercus robur</i>	as above – jak wyżej	1988	3.76	4.15	31.0	4	4
581	<i>Quercus petraea</i> „Dąb Sienkiewicza”	Szamotuły, 4075/2; owner: County Office Szamotuły Szamotuły, 4075/2; właściciel: Starostwo Powiatowe Szamotuły	1988	3.60	4.15	27.5	5	5
928/94	<i>Tilia cordata</i>	Myszkowo, 41/3; owner: Sebastian Żółtowski Myszkowo, 41/3; właściciel: Sebastian Żółtowski	1995	4.14	3.90	26.5	2	4

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9
No. in commune register 1/VIII/ 50/07 Nr wg rejestru gminnego 1/VIII/ 50/07	<i>Salix alba</i>	Pamiętkowo, Objezierze Forest Range, compartment 300 g; owner: Oborniki Forest Division Pamiętkowo, 1-ctwo Objezierze, oddz. 300 g; właściciel: Nadleśnictwo Oborniki	2007	3.20	3.23	21.0	4	4
No. in commune register 2/VIII/ 50/07 Nr wg rejestru gminnego 2/VIII/ 50/07	<i>Crataegus laevigata</i>	as above – jak wyżej	2007	1.10	1.12	11.0	3	4
No. in commune register 3/VIII/ 50/07 Nr wg rejestru gminnego 3/VIII/ 50/07	<i>Populus alba</i>	Baborowo, Objezierze Forest Range, compartment 276 d; owner: Oborniki Forest Division Baborowo, 1-ctwo Objezierze, oddz. 276 d; właściciel: Nadleśnictwo Oborniki	2007	6.00	6.00	26.0	4	4
No. in commune register 4/VIII/ 60/07 Nr wg rejestru gminnego 4/VIII/ 60/07	<i>Quercus robur</i>	Przeclaw, 72; owner: Ewa Paul Przeclaw, 72; właściciel: Ewa Paul	2007	2.86	2.89	18.0	5	5
Wronki commune – Gmina Wronki								
324	<i>Quercus robur</i>	Wronki, 2022; owner: the Wronki Town and Commune Office Wronki, 2022; właściciel: Urząd Miasta i Gminy we Wronkach	1982	2.83	3.51	21.0	4	4
373	<i>Quercus robur</i>	Pożarowo, 26/3; owner: Jan Nowierski Pożarowo, 26/3; właściciel: Jan Nowierski	1983	4.25	5.00	30.0	4	3
474	<i>Quercus robur</i>	Chojno, Pustelnia Forest Range, compartment 284 c; owner: Wronki Forest Division Chojno, 1-ctwo Pustelnia, oddz. 284 c; właściciel: Nadleśnictwo Wronki	1986	3.61	4.00	22.5	4	3
475	<i>Fagus sylvatica</i>	as above – jak wyżej	1986	1.62, 1.72, 2.15, 2.70, 2.70	1.73, 1.88, 2.20, 2.28, 2.34	23.0	4	5
476	<i>Quercus robur</i>	Wronki, Smolnica Forest Range, compartment 396 b; owner: Wronki Forest Division Wronki, 1-ctwo Smolnica, oddz. 396 b; właściciel: Nadleśnictwo Wronki	1986	5.50	6.00	31.0	4	4

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5	6	7	8	9
477	<i>Pinus sylvestris</i>	Smolnica, Smolnica Forest Range, compartment 392 m; owner: Wronki Forest Division Smolnica, l-ctwo Smolnica, oddz. 392 m; właściciel: Nadleśnictwo Wronki	1986	2.70	2.80	22.0	4	3
661	<i>Quercus robur</i>	Chojno, Chojno Forest Range, compartment 355 d; owner: Wronki Forest Division Chojno, l-ctwo Chojno, oddz. 355 d; właściciel: Nadleśnictwo Wronki	1996	4.00	4.16	25.0	4	4

Table 2. List of tree clusters, shrubs, localities of protected species and erratic stones – nature monuments in communes of the Szamotuły County

Tabela 2. Zestawienie grup drzew, krzewów, stanowisk gatunków chronionych, głazów narzutowych uznanych pomnikami przyrody w powiecie szamotulskim

Number according to the provincial register Numer według rejestru wojewódzkiego	Protected object/name Przedmiot ochrony/nazwa	Location; property owner Lokalizacja; właściciel terenu	Year of establishment Rok ustanowienia	Dimensions Wymiary			Health state Stan zdrowotny	
				girth at the year of establishment obwód pnia w roku ustanowienia m	girth obwód pnia m	height wysokość m	of stem pnia	of crown korony
1	2	3	4	5	6	7	8	9
Każmierz commune – Gmina Każmierz								
74	5 <i>Sorbus torminalis</i> trees	Bytyń, Bytyń Forest Range, compartment 297 c; owner: Pniewy Forest Division Bytyń, l-ctwo Bytyń, oddz. 297 c; właściciel: Nadleśnictwo Pniewy	1957	0,60-1.29	0.95-1.64	2.50-7,00	1-4	1-4
75	7 <i>Sorbus torminalis</i> trees	Bytyń, Bytyń Forest Range, compartment 286 l, m; owner: Pniewy Forest Division Bytyń, l-ctwo Bytyń, oddz. 286 l, m; właściciel: Nadleśnictwo Pniewy	1957	1.16-1.38	1.16-1.59	16.0-23.0	3-4	2-4
79	3 <i>Sorbus torminalis</i> trees	Bytyń, Bytyń Forest Range, compartment 298 b, h; owner: Pniewy Forest Division Bytyń, l-ctwo Bytyń, oddz. 298 b, h; właściciel: Nadleśnictwo Pniewy	1957	0.44-1.48	1.40-2.26	19.0-23.0	4	4
452	2 <i>Tilia cordata</i> trees	Bytyń, 116/3; owner: the Roman Catholic Parish in Bytyń Bytyń, 116/3; właściciel: parafia rzymsko-katolicka w Bytyniu	1986	2.92 and – i 3.68	3.30 and – i 4.10	14.0 and – i 12.0	3 and – i 4	3 and – i 4

Table 2 – cont. / Tabela 2 – cd.

1	2	3	4	5	6	7	8	9
Obrzycko commune – Gmina Obrzycko								
311	4 <i>Larix decidua</i> trees	Zielonagóra, 16/1; owner: Artistic and Leisure Centre of the Adam Mickiewicz University Zielonagóra, 16/1; właściciel: Dom Pracy Twórczej i Wypoczynku UAM	1975	2.50-3.10	2.55-3.97	22.0-32.0	4	2-4
459	6 <i>Quercus robur</i> trees	Kobylniki, 37/22; owner: the Agricultural Property Agency of the State Treasury Kobylniki, 37/22; właściciel: Agencja Nieruchomości Rolnych	1986	3.80-4.80	3.56-4.80	17.5-31.0	3-4	3-4
567	32 <i>Pinus sylvestris</i> trees “Sosny nad Samą”	Obrzycko, 81038/4; owner: Oborniki Forest Division Obrzycko, 81038/4; właściciel: Nadleśnictwo Oborniki	1986	1.00-2.12	1.05-2.50	12.0-14.0	4	4
903/94	approx. 0.6 ha with <i>Pinus mugo</i> “Kosodrzewina obrowska” około 0,6 ha z <i>Pinus mugo</i> „Kosodrzewina obrowska”	Obrowo, 60/1; owner: the State Agency of Agricultural Real Estate Obrowo, 60/1; właściciel: Agencja Nieruchomości Rolnych	1995	Apart from <i>Pinus mugo</i> , <i>Pinus sylvestris</i> and interspecies hybrids also grow on the plot. Single dwarf mountain pine specimens grow on the edges of tree planting. In the central part this pine is replaced by common birch. Numerous stumps after felled pines. Prócz <i>Pinus mugo</i> , na działce rosną <i>Pinus sylvestris</i> i mieszańce międzygatunkowe. Pojedyncze osobniki kosodrzewiny rosną na obrzeżu zadrzewienia. W części centralnej sosna ta jest wypierana przez brzozę brodawkowatą. Liczne pniaki po wyciętych sosnach.				
No. in commune register XX/85/00 Nr wg rejestru gminnego XX/85/00	erratic “Kwiryn” glaz narzutowy „Kwiryn”	Obrzycko, Daniele Forest Range, compartment 1044 h; owner: Oborniki Forest Division Obrzycko, l-ctwo Daniele, oddz. 1044 h; właściciel: Nadleśnictwo Oborniki	2000	Granite breccia from Scandinavia partly excavated and protruding to a height of approx. 0.5 m above the ground surface. The rock is brown-red with white veins of milky quartz of varying thickness. Erratic circumference – 11.0 m, height – 2.50 m. No moss or lichen cover. Brekcja granitowa ze Skandynawii częściowo odkopana i wystaje ponad powierzchnię podłoża na wysokość około 0,5 m. Skala jest brązowoczerwona z białymi żyłkami kwarcu mlecznego o zmiennej grubości. Obwód glazu – 11,0 m, wysokość – 2,50 m. Brak pokrycia mchami i porostami.				
Ostroróg commune – Gmina Ostroróg								
521	2 <i>Pinus sylvestris</i> trees	Szczepankowo, 226; owner: Maria Grabowska-Dutkiewicz Szczepankowo, 226; właściciel: Maria Grabowska-Dutkiewicz	1986	2.18 and – i 2.45	2.30 and – i 2.65	21.0 and – i 18.0	4 and – i 4	3 and – i 3
Szamotuły commune – Gmina Szamotuły								
582	3 <i>Taxus baccata</i> trees “Cis Halszki”	Szamotuły, 4075/1; owner: County Office Szamotuły Szamotuły, 4075/1; właściciel: Starostwo Powiatowe Szamotuły	1988	0.97-1.57	1.15-2.10	12.0-14.5	2-4	4-5
929/94	5 <i>Fraxinus excelsior</i> trees	Myszkowo, 41/3; owner: Sebastian Żółtowski Myszkowo, 41/3; właściciel: Sebastian Żółtowski	1995	2.40-2.92	2.60-2.95	24.5-26.5	4-5	4

Table 2 – cont. / Tabela 2 – cd.

1	2	3	4	5	6	7	8	9
930/94	6 <i>Taxus baccata</i> trees	Otorowo, 442; owner: the Roman Catholic Parish in Otorowo Otorowo, 442; właściciel: parafia rzymskokatolicka w Otorowie	1995	1.19-1.75	1.25-1.90	7.50-14.0	4	3-4
Wronki commune – Gmina Wronki								
361	<i>Platanus ×hispanica</i> <i>Liriodendron tulipifera</i>	Pożarowo, 19/2; owner: State Nursing Home for Men at Pożarowo Pożarowo, 19/2; właściciel: Państwowy Dom Pomocy Społecznej dla Mężczyzn w Pożarowie	1983	6.30	7.15	30.0	4	4
				4.20	4.50	15.5	3	2
371	2 <i>Quercus robur</i> trees	Pakawie, 39; owner: Regional Office in Czarnków Pakawie, 39; właściciel: Urząd Rejonowy w Czarnkowie	1983	5.15 and – i 5.75	5.54 and – i 5.96	23.5 and – i 27.5	4 and – i 3	4 and – i 4
372	erratic glaz narzutowy	Wartosław	1983	Erratic circumference – 5.40 m, height – 0.97 m; roadside of field road, forest edge; no lichen and moss cover; marking of tourist trail painted on it. Obwód glazu – 5,40 m, wysokość – 0,97 m; pobocze polnej drogi, skraj lasu; brak pokrycia porostami i mchami; na nim namalowane jest oznakowanie szlaku turystycznego.				
375	8 <i>Platanus ×hispanica</i> trees 6 <i>Populus alba</i> trees <i>Ulmus laevis</i>	Nowa Wieś, 227/2; owner: State Nursing Home for Women in Nowa Wieś – County Office in Szamotyły Nowa Wieś, 227/2; właściciel: Państwowy Dom Pomocy Społecznej dla Kobiet w Nowej Wsi – Starostwo Powiatowe Szamotyły	1984	3.00-4.60	3.52-4.5	25.0-32.0	1-5	2-5
				3.00-6.50	3.08-5.10	15.0-34.0	1-4	1-3
				4.30	4.50	33.0	3	4
449	48 <i>Pinus sylvestris</i> trees	Chojno, Pustelnia Forest Range, compartment 346 f; owner: Wronki Forest Division Chojno, I-ctwo Pustelnia, oddz. 346 f; właściciel: Nadleśnictwo Wronki	1985	0.97-2.40	1.10-2.50	20.0-25.0	4	4
472	119 <i>Pinus sylvestris</i> trees 5 <i>Larix decidua</i> trees	Tomaszewo, Lubowo Forest Range, compartment 184 b, c; owner: Wronki Forest Division Tomaszewo, I-ctwo Lubowo, oddz. 184 b, c; właściciel: Nadleśnictwo Wronki	1986	1.02-1.74	1.10-2.05	22.0-25.0	4	4
				0.78-1.26	1.33-1.78	24.0-26.0	4	4
473	12 <i>Quercus robur</i> trees	Chojno, Samita Forest Range, compartment 334 n; owner: Wronki Forest Division Chojno, I-ctwo Samita, oddz. 334 n; właściciel: Nadleśnictwo Wronki	1986	2.40-4.40	2.57-4.88	18.0-30.0	1-4	1-4
479	<i>Tilia cordata</i> <i>Fagus sylvatica</i> <i>Platanus ×hispanica</i>	Biezdrowo, 82/1; owner: Robert and Jarosław Moryson Biezdrowo, 82/1; właściciel: Robert i Jarosław Moryson	1986	0.60-0.70	1.10-2.33	26.0	4	4
				3.35	3.80	25.5	4	4
				3.70	3.95	35.0	4	4

Table 2 – cont. / Tabela 2 – cd.

1	2	3	4	5	6	7	8	9
480	5 <i>Tilia cordata</i> trees	Ćmachowo, 94; owner: the Wronki Town and Commune Office Ćmachowo, 94; właściciel: Urząd Miasta i Gminy we Wronkach	1986	3.20-3.65	3.25-4.90	24.0-27.0	3-4	4
504	locality of <i>Osmunda regalis</i> stanowisko <i>Osmunda regalis</i>	Chojno, Pustelnia Forest Range, compartment 324 f; owner: Wronki Forest Division Chojno, l-ctwo Pustelnia, oddz. 324 f; właściciel: Nadleśnictwo Wronki	1988	At the time of establishment the nature monument included a locality of royal fern in the lake shore belt of Lake Radziszewski at a length of 153 m and width of 3 m. At present there are only single specimens, which occupy a belt of approx. 20 m in length and max. width of 3 m. Brakes predominate in this belt. W chwili powołania pomnik przyrody obejmował stanowisko dłuższa królewskiego w pasie przybrzeżnym Jeziora Radziszewskiego długości 153 m i szerokości 3 m. W chwili obecnej są to tylko pojedyncze osobniki, które zajmują pas długości ok. 20 m i maksymalnej szerokości 3 m. W pasie tym dominuje orlica.				
594	<i>Tilia cordata</i> <i>Quercus robur</i>	Krasnobrzeg, 1, 2; owner: Regional Water Management Board in Poznań Krasnobrzeg, 1, 2; właściciel: Regionalny Zarząd Gospodarki Wodnej w Poznaniu	1993	5.60 3.55	6.00 4.00	12.0 25.0	2 4	3 5
595	2 <i>Tilia cordata</i> trees	Rzeczcin, 7/1; owner: the Wronki Town and Commune Office Rzeczcin, 7/1; właściciel: Urząd Miasta i Gminy we Wronkach	1993	2.35 and – i 3.60	2.70 and – i 3.96	23.0 and – i 24.0	5 5	5 5
596	<i>Platanus ×hispanica</i> <i>Tilia cordata</i>	Wróblewo, 14/37; owner: Wojciech Szczepaniak Wróblewo, 14/37; właściciel: Wojciech Szczepaniak	1993	4.40 4.10	4.90 4.33	27.5 29.0	5 4	5 4
662	5 <i>Quercus robur</i> trees	Chojno, Chojno Forest Range, compartment 355 d; owner: Wronki Forest Division Chojno, l-ctwo Chojno, oddz. 355 d; właściciel: Nadleśnictwo Wronki	1996	2.70-5.70	3.05-4.03	20.0-30.0	3-4	4

- English oaks – nine had circumferences of 5-6 m, and two biggest had circumferences of 6.05 and 6.27 m (nos. 111 and 199, Szamotuły commune; Table 1)
- small-leaved limes – five of them had circumferences of 4-5 m and one had a circumference of 6.0 m (no. 594, Wronki commune; Table 1)
- wild service trees – five of them had circumferences of over 1.5 m
- common elms – four had circumferences of 3.00-3.48 m
- European larches – three had circumferences of 3.36-3.97 m (no. 311, Obrzycko commune; Table 2)
- Scots pines – circumferences of two trees are 3.03 and 3.18 m (nos. 396 and 454, communes of Szamotuły and Obrzycko; Table 1)
- common yews – one has an impressive circumference of 3.7 m (no. 511, Pniewy commune; Table 1), the other has three stems with circumferences of 0.7, 0.9 and 1.0 (no. 110, Szamotuły commune; Table 1)

- a London plane from Pożarów, with a circumference of 7.15 m (no. 361, Wronki commune; Table 2)
- a tulip tree with a circumference of 4.5 m (no. 361, Wronki commune; Table 2)
- a Norway maple growing in the forests of the Dąbrowa Forest District, with a circumference of 3.52 m (no. 1159/00, Pniewy commune; Table 1)
- a common horse chestnut from Bytyń with a circumference of 5.3 m (no. 410, Kaźmierz commune; Table 1)
- a common ash growing in the former manor park at Myszkowo – circumference of 5.3 m (no. 570, Szamotuły commune; Table 1)
- a grey poplar with an impressive circumference of 6.0 m (no. 3/VIII/50/07, Szamotuły commune; Table 1)
- a Norway spruce from Zajączkowo with a circumference of 3.25 m (no. 512, Pniewy commune; Table 1)
- a false acacia with a circumference of 4.4 m (no. 309, Szamotuły commune; Table 1)
- a Scotch elm growing in the former manor park at Kikowo, with a circumference of 4.3 m (no. 509, Pniewy commune; Table 1).

Nature monuments are found on state-owned land as well as private land. The biggest number of monuments is found in state forests (57.9%) and former manor parks (21.9%). Plaques with an inscription NATURE MONUMENT are used to mark 54% trees ranked as monuments and 60.9% clusters of trees, while only every eighth tree in a monument cluster bears the information plaque. Such a plaque was also used to mark one erratic. Only six nature monuments (two in the Obrzycko commune and four in the Szamotuły commune) were established by local government units, while the other by the Provincial Governor or the Provincial Council.

Quantitative changes were recorded in the tree clusters classified as nature monuments:

- monument no. 567 (Obrzycko commune) established in 1986 was formed by 53 Scots pines; at present only 32 *Pinus sylvestris* trees are left
- monument no. 459 (Obrzycko commune) in 1984 was formed by seven English oaks; one of them was wind-fallen by a storm in 1986 and it was removed from the park
- in 1975 a cluster of six larches was covered by protection as a monument (no. 311, Obrzycko commune); four trees are left from that cluster
- monument no. 375 established in 1984 (Wronki county) consisted of nine London planes, six grey poplars and one Russian elm; one plane was wind-fallen and removed from the park; the number of poplars and elms remains the same
- a cluster of 190 Scots pines which survived a mass outbreak of pine noctuide of 1922-24 formed monument no. 449 (Wronki commune); as a result of a gale storm only 48 *Pinus sylvestris* trees are left today
- for the protection of 131 Scots pines and five European larches monument no. 472 was established in 1986 (Wronki commune); in 2007 119 pines were recorded; the number of larches did not change
- monument no. 479 established in 1986 (Wronki commune), next to a London plane, a small-leaved lime and a common beech it was formed also by an eastern white pine
- in the Wronki commune, monument no. 480 was established in 1986 for the protection of five small-leaved limes, three grey poplars and one common ash; pop-

lars were wind-fallen in 1987 and removed from the monument records; the ash was not found

- *Platanus ×hispanica* and *Tilia cordata*, marked with nos. 517 and 519 (Ostroróg commune) were not found. Probably they were cut down. These trees were not included in the list of monuments (Table 1).

DISCUSSION

Impressive trees of the Szamotuły county were mentioned in several publications from the period between WWI and WWII. Kulesza [1928] reported on an umbrella-shaped pine *Pinus sylvestris* from the Wronki Forest Division with a circumference of 3.5 m and height of 10 m, a huge juniper tree *Juniperus communis* from the Las Dusznicki forest. From the Las Bytyński forest he mentioned a common hawthorn *Crataegus laevigata* and sycamore maple *Acer pseudoplatanus*. Stecki [1928] mentioned an S-shaped common birch *Betula pendula* growing in the Las Bytyński forest as “peculiar and deserving protection”. In the “Inventory of monument limes in Poland” [Środoń 1935] there is information on a large-leaved lime with a circumference of 4.55 m growing in Papiernia near Obrzycko. Wodziczko et al. [1938] supplemented a list of “monuments of nature” in the Szamotuły county with an impressive oak growing in Rudki near Pniewy and a daphne *Daphne mezereum* from a forest near Bytyń.

The above mentioned impressive trees were not covered by monument protection in the period after WWII and did not survive till today. It may be assumed that only from the cluster of 180 tall-stemmed wild service trees *Sorbus torminalis* growing in the Las Bytyński forest, mentioned by Kulesza [1928], considered nature monument trees or tree clusters now found as nos. 72, 74, 75, 79, 1214/01 and 1220/01. In order to protect one of the most numerous clusters of *Sorbus torminalis* in the Wielkopolska region in 1959 two forest reserves were also established, i.e. “Brzęki przy Starej Gajówce” and “Bytyńskie Brzęki”.

Kulesza [1928] also described two lock lems *Ulmus minor* growing at a Catholic church in Szamotuły (one with a circumference of 9 m and 27.9 m height, the other with a circumference of 5.1 m and height of 26.5 m). It is possible that one of them was established as a nature monument in 1956 under the name of “Wiąz Marysieński” with a circumference of 7.60 m or “Sobieski” with a circumference of 6.00 m, which protection was abolished in the 1980’s.

Iwanowski et al. [1966] among monuments of nature in the Wielkopolska region mentioned 32 nature monuments from the Szamotuły county, of which 19 survived till today.

Monographs on common yew [Czartoryski 1975], larches and limes [Białobok 1986, 1991], maples [Denisiuk et al. 1999] and Scots pine [Białobok 1993] contain information on monuments nos. 110, 310, 311, 395, 396, 488, 489 and 513, 518. Reported circumferences and heights of monuments do not differ from circumferences given for those trees for the year they were established as nature monuments.

Pacyniak [1992] considered a tulip tree *Liriodendron tulipifera* (monument no. 361) growing in Pożarowo to be the oldest in Poland. This tree is now 225 years old. Other trees mentioned by that author, such as a Norway maple growing in Biezdrowo (circum-

ference 2.83 m, height 24 m), a crab tree (circumference 1.82 m, height 21 m) and a pear tree (circumference 2.01 m, height 17 m) growing in the Las Bytyński forest are not covered by protection as monuments.

In the last decades the number of nature monuments in Poland has increased markedly. Strojny [1992] reported that in 1925 the list of all monuments of nature included 600 items, while in 1937 it was 4468 items. From 1960 (4815) to 1993 (22 151) the number of nature monuments increased 4.6-fold [Brzeźniak 1995]. Nationwide the biggest number of monuments (7090) was established in the period 1980-1990, which is also reflected in the analysed area. Among inventoried 114 nature monuments 16 were established in the 1950's, five in the 1960's, three in the 1970's, 48 in the 1980's and 11 in the 1990's. Between 2000 and 2007 a total of 31 nature monuments were established, of which as many as 19 are located in the Pniewy commune.

Among single trees classified as nature monuments the most numerous are English oaks (44 trees – 50.6%) and small-leaved limes (8 trees – 9.2%). According to Zarzyński [2003] the biggest number of monument English oaks are growing in the Wielkopolskie province.

Historical parks and gardens in the opinion of Harabin et al. [1998] are still an insufficiently investigated source of potential nature monuments. In the Szamotuły county monuments found in historic parks account for 22% all monuments.

The percentage of individual types of monuments in the Szamotuły county does not differ markedly from the national data. According to Strojny [1992], up to 1986 a total of 10 610 single trees (70.6% all monuments), 2675 tree clusters (17.8%), 400 avenues (2.7%) and 852 erratics (5.7%), 204 rocks (1.4%) and 292 others (1.9%) were recorded in Poland. Up to 1993 a total of 22 151 monuments were established – 16 172 single trees (73% all monuments), 3671 tree clusters (16.6%), 558 avenues (2.5%) and 986 erratics (4.5%) as well as 764 rocks, grottoes and caves (3.4%) [Brzeźniak 1995]. According to data of the Central Statistical Office [Small statistical... 2007] in 2006 a total of 34 549 monuments were recorded, including 26 972 trees (78% all monuments) and 4804 tree clusters (14%) and erratics (3.5%). In the Szamotuły county in 2007 a total of 114 nature monuments were inventoried, including 87 single trees (76.3%), 23 tree clusters (20.2%), one shrub (0.9%), one locality of a protected species (0.9%) and two erratics (1.7%).

A considerable proportion of trees (77.9%) is not marked with an official plaque. It is possible that its lack is one of the reasons for the unconscious removal of trees – monuments from private plots. It is suggested to eliminate from the nature monument records:

- monument no. 517 – a London plane, which grew in the central part of the former manor landscape park of the first half of the 19th century in Szczepankowo, at the main park avenue; in the course of investigations in 2007 the tree was not found – it had probably been cut down
- monument no. 519 – a small-leaved lime, which grew in the former manor landscape park from the first half of the 19th century in Szczepankowo 12 m to the south-east of the manor house; the tree was not found during the survey of 2007
- from the tree cluster forming monument no. 480 it is proposed to eliminate a European ash; at the moment it was established the circumference of its stem was 3.58 m and the height was 33.0 m; in 2007 the tree was not found in the park.

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POMNIKI PRZYRODY POWIATU SZAMOTULSKIEGO (WOJEWÓDZTWO WIELKOPOLSKIE)

Streszczenie. W pracy przedstawiono wyniki pierwszej w okresie powojennym inwentaryzacji pomników przyrody siedmiu gmin powiatu szamotulskiego: Duszniki, Kaźmierz, Obrzycko, Ostroróg, Pniewy, Szamotuły i Wronki. Łącznie zinwentaryzowano 114 pomników przyrody – pojedyncze drzewa stanowią 76,3% wszystkich pomników, a grupy drzew – 20,2%. Pomnikiem jest także stanowisko *Osmunda regalis*, grupa *Pinus mugo* oraz dwa głązy narzutowe. Łącznie zinwentaryzowano 384 drzewa 25 gatunków. W przypadku pojedynczych drzew uznanych za pomniki przyrody najliczniejszą grupę tworzą dęby szypułkowe (44 drzewa – 50,6%), a w grupach drzew zdecydowanie przeważają sosny pospolite (201 drzew – 67,7%). Najwięcej pomników występuje w lasach państwowych (57,9%) i parkach podworskich (21,9%). Znakowanych tabliczką POMNIK PRZYRODY jest 54% drzew w randze pomnika i 60,9% grup drzew, przy czym tylko co ósme drzewo grupowego pomnika ma tabliczkę informacyjną. Tabliczką oznakowano także jeden głąz narzutowy. Najokazalszym drzewem w badanym powiecie jest platan klonolistny z Pożarowa o obwodzie 7,15 m.

Słowa kluczowe: pomnik przyrody, powiat szamotulski, ochrona przyrody

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