

Wildfire database for Poland in the period 1990-2004

Year	Total No. of Fires on Forest, Other Wooded Land & Other Land No.	Total Area Burned on High Forest, & Other Land ha	No. of Fires on High Forest and Other Wooded Land (with parks and urban forests) No.	No. of Fires Other Land No.	Area of Other Land Burned*) ha	No. of Fires High Forest (without parks and urban forests) No.	Area of High Forest Burned (without parks and urban forests) ha	Causes of Fires on High Forest Fire (without parks and urban forests)		
								Human Causes No.	Natural Causes No.	Unknown Causes No.
1990						5,756	7,341			
1991						3,528	2,567			
1992						11,858	43,755			
1993				6,930		8,821	8,290			
1994	15,877	28,386	10,710	5,167	19,215	10,245	9,171			
1995	13,414	18,648	7,681	5,733	13,342	7,367	5,306	6,614	56	697
1996	19,807	58,928	7,924	11,883	44,808	7,523	14,120	6,997	25	501
1997	19,304	48,430	6,818	12,486	41,832	6,528	6,598	6,032	19	477
1998	21,304	30,580	6,166	11,545	26,561	5,946	4,019	5,356	49	541
1999	25,835	35,791	9,820	16,015	27,484	9,405	8,307	8,589	26	790
<b>Average in the period 1990-1999</b>						7,698	10,947			
2000	28,452	31,277	12,428	16,024	24,264	11,840	7,013	10,715	64	1,061
2001	20,647	31,842	4,480	16,167	28,509	4,239	3,333	3,921	14	0,304
2002	32,638	31,376	10,101	22,537	26,293	9,676	5,083	8,901	39	0,736
2003	70,455	117,406	17,088	53,367	95,906	16,310	21,500			
2004	30,125	36,087	7,219	22,906	31,749	7,219	4,338			
<b>Average 2000-2004</b>	<b>36,463</b>	<b>49,598</b>	<b>10,263</b>	<b>26,200</b>	<b>41,344</b>	<b>9,857</b>	<b>9,857</b>			

\*) Moreover area burned of moor and heathland at each year they are amount: 1989 – 4,039 ha; 1990 – 9,553 ha; 1992 – 31,566 ha.

**Statistical data of fires in high forest in Poland in the period 1951-2004**

Period	Annual Mean						
	Number of Fires on High Forest		Area Burned on High Forest [ha]		Average Area of Fire on High Forest [ha]		
	Total	in State Forests	Total	in State Forests	Total	in State Forests	Others
1951-1955		1609		5069		3.15	
1956-1960		1344		2946		2.19	
1961-1965		1298		2641		2.03	
1966-1970		1569		1822		1.16	
1971-1975		2094		2708		1.29	
1976-1980		1757		2610		1.49	
1981-1985		2627		3871		1.47	
1986-1990		3001		3603		1.20	
1991-1995	8364	5206	13818	8673	1.65	1.67	1.63
1996-2000	8366	4232	8011	2500	0.96	0.59	1.33
2001-2004	9722	4365	8564	1761	0.88	0.40	1.27
1951-1960		1477		4007		2.71	
1961-1970		1434		2232		1.56	
1971-1980		1925		2659		1.38	
1981-1990		2814		3737		1.33	
1991-2000	8365	4719	10915	5587	1.30	1.18	1.46
1951-1980		1612		2966		1.84	
1951-1990		1913		3159		1.65	
1951-2000		2474		3644		1.47	
1961-1980		1680		2446		1.46	
1961-1990		2058		2876		1.40	
1961-2000		2723		3554		1.31	

**Statistical data of fires on high forest in Poland in the period 1980-2004**

Year	Mean Fire area [ha]			Percent Share of Fire on High Forest		Percent Share of Burned Area on High Forest			
				in State Forests		Total in Poland	in State Forests		Total in Poland
	Total	in State Forests	without State Forests	in all Domestic Fires [%]	as Compared to the Mean in Europe [%]	as Compared to the Mean in Europe [%]	in all Domestic Fires [%]	as Compared to the Mean in Europe [%]	as Compared to the Mean in Europe [%]
<b>1980</b>		<b>1.52</b>							
<b>1981</b>		<b>1.48</b>			<b>3.15</b>				
<b>1982</b>		<b>1.51</b>			<b>9.76</b>				
<b>1983</b>		<b>1.24</b>			<b>9.62</b>				
<b>1984</b>	<b>1.69</b>	<b>1.85</b>	<b>1.32</b>	<b>70</b>	<b>7.16</b>	<b>10.30</b>	<b>76</b>	<b>1.42</b>	<b>1.86</b>
<b>1985</b>	<b>1.04</b>	<b>1.11</b>	<b>0.65</b>	<b>85</b>	<b>2.68</b>	<b>3.62</b>	<b>91</b>	<b>0.16</b>	<b>0.17</b>
<b>1986</b>	<b>1.24</b>	<b>1.22</b>	<b>1.31</b>	<b>85</b>	<b>7.46</b>	<b>8.78</b>	<b>84</b>	<b>0.59</b>	<b>0.70</b>
<b>1987</b>	<b>1.10</b>	<b>1.19</b>	<b>0.83</b>	<b>75</b>	<b>3.05</b>	<b>4.04</b>	<b>81</b>	<b>0.33</b>	<b>0.40</b>
<b>1988</b>	<b>1.30</b>	<b>1.10</b>	<b>4.89</b>	<b>95</b>	<b>6.24</b>	<b>6.57</b>	<b>81</b>	<b>0.60</b>	<b>0.74</b>
<b>1989</b>		<b>1.24</b>			<b>5.83</b>			<b>0.65</b>	<b>0.63</b>
<b>1990</b>	<b>1.28</b>	<b>1.22</b>	<b>1.43</b>	<b>72</b>	<b>6.08</b>	<b>8.47</b>	<b>69</b>	<b>0.72</b>	<b>1.05</b>
<b>1991</b>	<b>0.73</b>	<b>0.70</b>	<b>0.88</b>	<b>85</b>	<b>5.47</b>	<b>6.42</b>	<b>82</b>	<b>0.36</b>	<b>0.44</b>
<b>1992</b>	<b>3.69</b>	<b>3.58</b>	<b>4.08</b>	<b>78</b>	<b>12.28</b>	<b>15.64</b>	<b>76</b>	<b>7.37</b>	<b>9.68</b>
<b>1993</b>	<b>0.94</b>	<b>0.83</b>	<b>1.05</b>	<b>50</b>	<b>6.55</b>	<b>13.06</b>	<b>44</b>	<b>0.74</b>	<b>1.67</b>
<b>1994</b>	<b>0.90</b>	<b>0.49</b>	<b>1.31</b>	<b>50</b>	<b>7.08</b>	<b>14.08</b>	<b>27</b>	<b>0.34</b>	<b>1.24</b>
<b>1995</b>	<b>0.72</b>	<b>0.42</b>	<b>1.11</b>	<b>56</b>	<b>4.95</b>	<b>8.81</b>	<b>33</b>	<b>0.43</b>	<b>1.30</b>
<b>1996</b>	<b>1.88</b>	<b>1.17</b>	<b>2.96</b>	<b>60</b>	<b>5.34</b>	<b>8.84</b>	<b>38</b>	<b>2.01</b>	<b>5.34</b>
<b>1997</b>	<b>1.01</b>	<b>0.60</b>	<b>1.52</b>	<b>56</b>	<b>4.00</b>	<b>7.21</b>	<b>33</b>	<b>0.69</b>	<b>2.09</b>
<b>1998</b>	<b>0.68</b>	<b>0.43</b>	<b>1.01</b>	<b>57</b>	<b>3.46</b>	<b>6.04</b>	<b>36</b>	<b>0.29</b>	<b>0.80</b>
<b>1999</b>	<b>0.88</b>	<b>0.40</b>	<b>1.34</b>	<b>48</b>	<b>3.83</b>	<b>7.95</b>	<b>22</b>	<b>0.50</b>	<b>2.29</b>
<b>2000</b>	<b>0.56</b>	<b>0.35</b>	<b>0.77</b>	<b>41</b>	<b>3.60</b>	<b>8.86</b>	<b>25</b>	<b>0.19</b>	<b>0.76</b>
<b>2001</b>	<b>0.74</b>	<b>0.34</b>	<b>1.09</b>	<b>46</b>	<b>1.92</b>	<b>4.20</b>	<b>21</b>	<b>0.15</b>	<b>0.72</b>
<b>2002</b>	<b>0.50</b>	<b>0.31</b>	<b>0.62</b>	<b>37</b>					
<b>2003</b>	<b>1.26</b>	<b>0.51</b>	<b>1.95</b>	<b>48</b>					
<b>2004</b>	<b>0.60</b>	<b>0.29</b>	<b>0.89</b>	<b>48</b>					

**Fire protection activity in the State Enterprise “State Forests” in the period 1980-2004**

<b>Specification</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	
Fire belts: newly established [thousands km]	213	316	155	183	286	686	1017	735	594	525	459	489	703	563	340	392	251	
repair works in old ones [thousands km]	32.1	31.5	30.1	28.1	27.6	25.2	22.6	22.7	22.3	20.7	19.8	20.1	19.7	19.3	16.6	16.2	15.4	
Points of:	1005																	
Observation (look towers)		333	349	342	381	328	352	362	361	411	411	436	448	467	474	525	582	
Alarm communication		624	703	615	647	630	719	668	674	708	708	630	603	571	574	518		
Lookout (ground) patrols [pcs]	1005	2096	1842	1736	4018	3443	5436	4036	2830	2778	2461	2951	3048	2214	2725	2311	1893	
Water supply points <sup>1</sup>	8224 <sup>2</sup>	718	610	582	833	4401	3564	5284	5782	5745	5733	6026	5773	5886	5587	5832	6628	
Forest Aerial Bases		6	14	15	16	18	19	21	21	22	22	22	22	22	22	22	22	
Aircraft used: Patrol planes		6	11	9	13	16	18	17	18	18	16	15	16	17	12	11	10	
Extinguish planes		18	40	41	39	45	51	51	44	36	39	38	37	38	26	27	28	
Helicopters			3	5	9	15	14	16	14	13	12	11	12	12	9	8	9	
Fire equipment bases at the Forest Districts <sup>3</sup>											438	438	439	439	439	435	430	
Fire tenders in Forest District:	65	118	143					164						186				
Light														82	129	206	284	
Medium and Heavy														83	59	41	28	
Motor pumps in Forest District												149			149	211	257	
Radiotelephones	4093	5627	6516					8818				9567			8783	8405	8411	
Cost of fire protection 1 €= 4.20 PLN [millions €] [millions PLN]				2.3	3.7	5.4	8.1	10.8				10.7	13.2	15.6	13.5	12.3	14.0	14.4
including planes [millions €] [millions PLN]				9.8	15.7	22.6	33.9	45.2				45.0	55.4	65.7	56.8	51.6	58.7	60.6
Economic losses [millions €] [millions PLN]		5.5	2.0	1.2	33.0	2.4	2.4	2.2	5.2	2.7	2.0	2.5	2.0	0.7	1.0	3.7	0.8	
		23.0	8.4	5.1	138.6	10.1	10.2	9.3	21.7	11.5	8.2	10.4	8.6	2.9	4.4	15.7	3.5	

<sup>1</sup> The 1990–1991 data show exclusively the newly established points and maintenance cost of those earlier existing (without including those points where no financial cost was recorded).

<sup>2</sup> Existing ones.

<sup>3</sup> According to the actual rules, minimum one basis per Forest District must exists. No update data are currently available, given is only the number of FDs.

**Source:**

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