

551.584:502.4

2000–2015 .

... , 34503 . , ,  
e-mail: rivnepz@ukr.net, rpz-10@ukr.net

...  
2013 . – 64 ,  
+11,9° . 2002 . – 123 .  
2011 . – 42,1 . 2015 . 2008 . – 196,2 , –  
– 131 . 2010 . –  
2006 . – 90 . 2007 . , 471,3  
+19,8° . 2002 . ( 144,6 ) .  
2006 . (107 ) , 2001 . (57 ) . 2004 . ,  
+9,2° .  
2009 . – 178 , – 2001 . – 39 .  
2004/2005 2005/2006 . 114 . 2009–2010 .  
– 7,9° .  
2005/2006 . – 208,4 , 2012/2013 . – 52,2 .  
– 777,8 – 2012 . , – 427 – 2011 .  
– 27 , – 26 , – 14 , – 5 .  
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(“ ”, “ ”, “ ’ ”, “ ”).

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( . . 1–3, . 1–3).

[3, . 24].

[4, . 6].

I

## The timing of the seasons of the year

	( )			
1999	26.02 (57)	30.05 (150)	11.09 (254)	16.11 (320)
2000	23.02 (54)	14.05 (135)	16.09 (260)	26.11 (331)
2001	1.03 (60)	23.05 (143)	25.09 (268)	21.11 (325)
2002	20.01 (20)	23.05 (143)	12.09 (255)	1.12 (335)
2003	6.03 (65)	20.05 (140)	2.09 (245)	7.12 (341)
2004	7.03 (67)	29.05 (150)	6.09 (250)	21.11 (326)
2005	12.03 (71)	23.05 (143)	14.09 (257)	20.11 (324)
2006	15.03 (74)	12.06 (163)	10.09 (253)	26.12 (360)
2007	27.02 (58)	15.05 (135)	9.09 (252)	14.12 (348)
2008	18.02 (49)	8.06 (150)	12.09 (256)	14.12 (349)
2009	25.02 (56)	30.05 (150)	18.09 (261)	12.12 (346)
2010	18.02 (49)	20.05 (140)	17.09 (260)	27.11 (331)
2011	8.03 (68)	20.05 (140)	24.09 (267)	21.12 (355)
2012	9.03 (70)	4.06 (156)	9.09 (253)	4.12 (339)
2013	27.03 (86)	30.05 (150)	24.09 (267)	7.12 (341)
2014	6.02 (37)	15.05 (135)	9.09 (247)	26.11 (330)
2015	18.02 (49)	20.05 (140)	28.09 (271)	29.12 (363)
	<b>27.02 (58)</b>	<b>26.05 (146)</b>	<b>14.09 (257)</b>	<b>5.12 (339)</b>

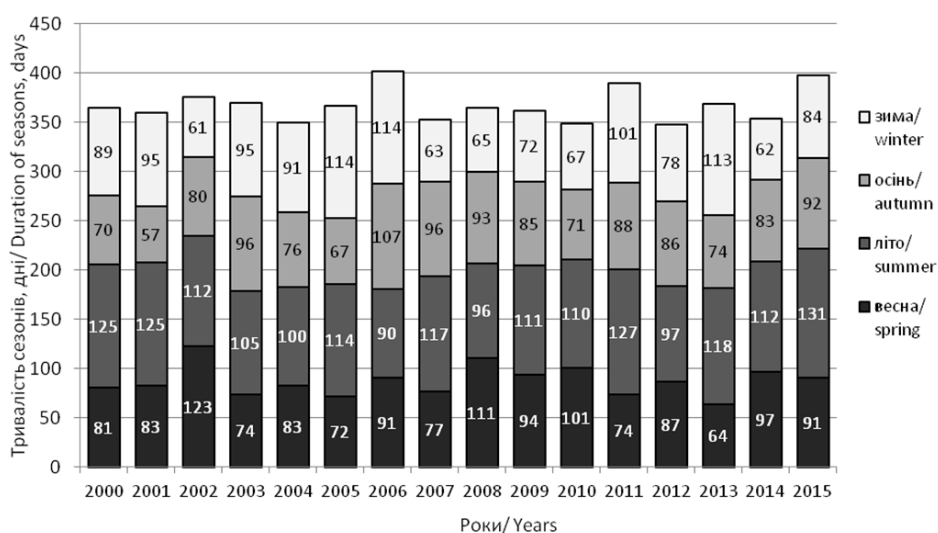


Fig. 1. Schedule of seasons seasons 2000–2015

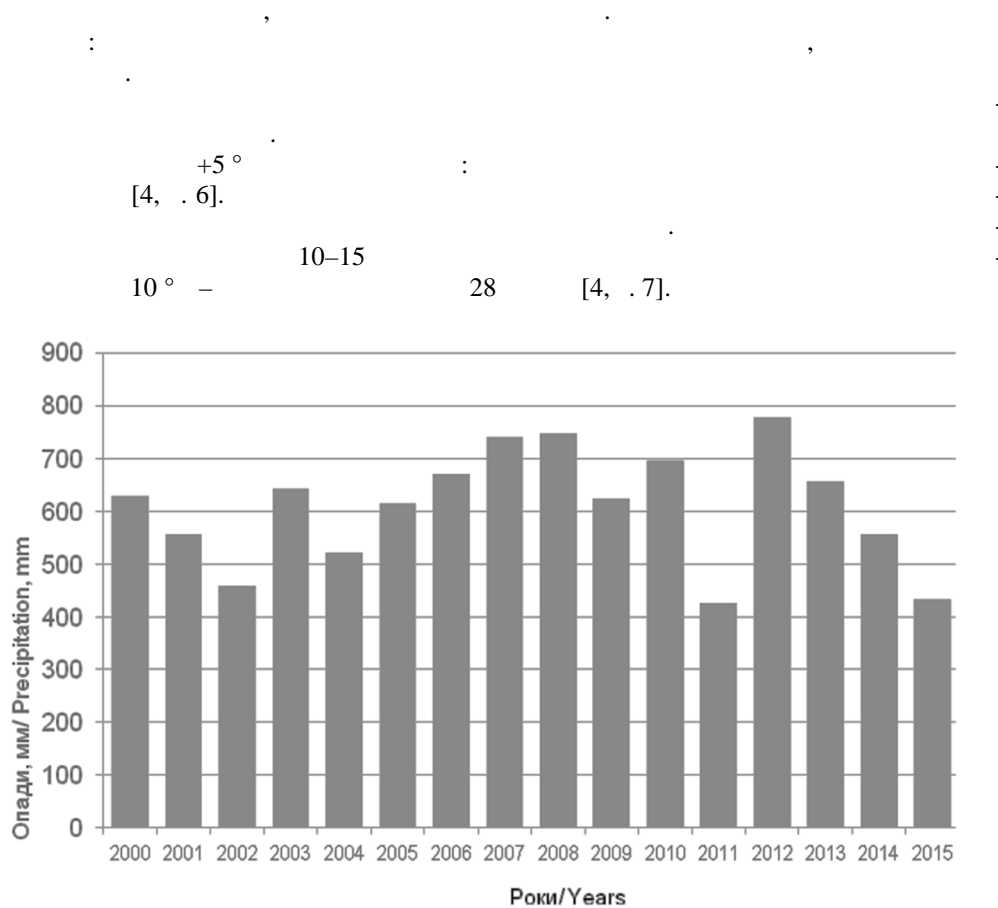


Fig. 2. Precipitation dynamics by years 2000–2015

[4, . 11].

+18,2°

2000–2015, °  
The average monthly air temperature for 2000–2015, °

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	-5,4	-4	0,6	8	14,1	17	18,2	17,4	13,1	7,7	2,3	-2,2
2000	3,1	0,8	2,4	12	14,7	17,2	17,2	18,2	11,2	9,5	5,5	1,4
2001	-1	-2,3	2,1	10,3	13,8	15,7	<b>22,4</b>	19,2	13	5	1,8	-7,1
2002	-2,2	3	4	8,7	16,5	17,5	22,2	19,8	13,4	6,9	4	-8,7
2003	-4	-6,5	0,5	6,7	17,3	17,1	20,1	18,1	13,1	5,9	4,3	-0,3
2004	-5,6	-2,4	2,4	8,2	12,4	16,5	19,6	18,8	12,9	9,4	2,8	0,2
2005	-0,5	-5	-1,4	9,3	13,9	16,8	20,1	18,1	14,7	8,3	1,6	-1
2006	-8,2	-6,2	-1,8	9,3	13,7	17,3	20,7	18,5	14,9	9	4,4	2,4
2007	2	-3,5	6,1	8,3	16,4	19,3	19,7	19,9	13,5	8,2	0,7	-1
2008	-1,7	1,3	3,6	9,8	13,5	18	19	19,2	12,9	9,6	3,8	0,5
2009	-3,1	-1,3	1,8	10	13,5	17,8	20,1	18	15,1	7,6	4,5	-2,8
2010	-9,4	-3,8	2,2	9,4	16,2	19,5	<b>22,4</b>	20,9	12,9	5,5	6,2	-4,5
2011	-2,2	-4,9	1,4	9,5	14,7	19,7	20,5	18,7	14,6	6,7	2,3	1,8
2012	-3,7	<b>-9,9</b>	3,3	9,7	16,7	17,9	22,1	19,1	14,8	8,6	4,9	-4,9
2013	-4,9	-0,3	-2,3	9,1	17,2	19,5	19,1	18,9	12,3	9,7	6,2	0,7
2014	-4,5	0,2	6,4	10,0	15,1	16,7	21,3	19,2	13,8	7,7	2,6	-0,9
2015	0,3	0	5	8,2	14,2	18,7	20,2	21,7	16	6,5	4,5	2,5

[4, . 13].

+17,4 °

[4, . 14].

160–170 [4, . 17].

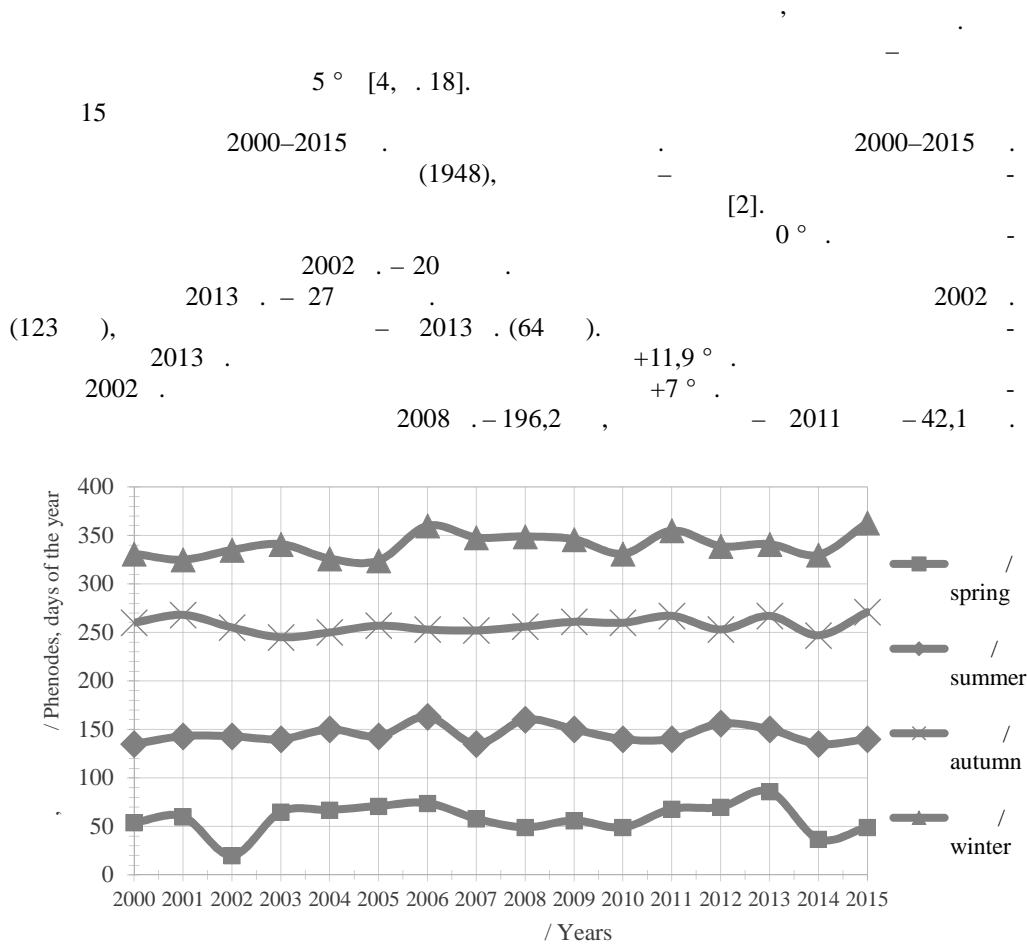


Fig. 3. Schedule of the onset of seasonal phenodon, 2000–2015

2000 . – 14 , +10 ° .  
 2006 . – 12 ,  
 2015 . – 131 .  
 2002, 2010,  
 2000–2015 . –  
 +19,8 ° .  
 2000 . –  
 +16,9 ° .  
 2001 . – +38,5 ° ( 16 ) .  
 2008 . – +36,2 ° ( 16 ) . 2015 .

– 1 +36,3 ° . -  
 2007 .. 471,3 , - 2002 . (144,6 ).  
 +10 ° . 2003 . – 2 -  
 – 2015 . – 28 2006 . (107 ), – 2001 . (57 ).  
 2004 .. 2011 . +9,2 ° .  
 39 , 2009 . – (178 ). +4,7 ° .  
 0 ° . – 16 1999 .. -  
 – 29 2015 . 2004/2005  
 2005/2006 . – 114 .  
 2001/2002 2013/2014 . – 61 .  
 2009/2010 . -7,9 ° .  
 2006/2007 . -0,6 ° .  
 2012/2013 . (52,2 ).  
 2006 . – 30,2 ° (6 ).

3

Average monthly and annual precipitation, mm

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
	39	32	30	45	59	94	81	63	58	43	42	43	629
2000	40,6	30,6	54,9	55,3	19,6	49,5	199,3	20,4	59,4	5,7	41,4	52,4	629,1
2001	43,9	29,3	47,8	17,6	43,4	91,9	68,2	47,8	118,8	20,7	20,7	15,8	555,9
2002	30,8	34,1	16	44,5	14,9	59,2	48,9	47,8	29,4	82,4	27,6	24,2	459,8
2003	28,9	35,4	21,8	38,4	80,9	59,3	167,9	53,4	26,1	76,2	31,9	21,5	641,7
2004	34,7	48,8	27,9	22,7	46,4	53,3	57,3	87,1	28,1	28,9	69	17,7	521,9
2005	30,8	37,2	50,4	36,7	64,4	72,4	85,6	82,3	8,4	37,3	39,6	69,6	614,7
2006	8,9	45,6	49,1	28,1	67	109,7	104,7	173,5	27,4	12,3	33,3	10,8	670,4
2007	58	34,8	20,5	27,5	53,3	79,5	<b>264,9</b>	84	20,7	42	27,2	27,2	739,6
2008	50,3	18,4	45,6	95,8	47,6	12,5	238,5	42,5	116,2	31,8	26,5	20,6	746,3
2009	26,8	32,6	56,7	4,2	81,1	83,1	38,1	64,1	22,2	92,1	75,4	46,7	623,1
2010	27,9	38,1	18,6	14,8	75,3	75,7	74,9	124,1	95,6	22,9	63,9	64,8	696,6
2011	26,9	33,7	8,9	15,8	23,5	42,4	112,2	77,5	12,2	23,1	5,8	45	<b>427</b>
2012	42,7	30,6	24,2	59,2	52	148,4	62,5	160	68,1	52,5	28,6	49	<b>777,8</b>
2013	66,3	30,6	65,8	31,3	50,3	121,3	44,9	33,7	121,9	11,1	56,9	21,2	655,3
2014	41,8	21,1	25,7	38,7	118,8	48,2	51,3	108,5	14,2	11,1	34,4	42,6	556,4
2015	24,1	18,4	24,3	21,8	62,6	16,6	54	<b>5,9</b>	71,1	14,6	84	35,3	432,7

Year	Temperature (°C)	Precipitation (mm)	Spring period (days)
2012	-777,8	-	-
2011	-427	-	-
2000–2015	-	-27	-
	-26	-14	-5
	-	-	-
	-	-	-
1. 2000–2008	-	-	-
2. 2009	755–759	-	-
3. 1948	157	-	-
4. 2000–2013	-	-	1–12

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: 31.05.2018  
05.06.2018  
12.06.2018

### ANALYSIS OF CLIMATE OF RIVNENSKYI NATURE RESERVE from 2000 to 2015

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The analysis of monthly climatic terms of Rivnenskyi Nature Reserve was conducted. It is marked that weather terms have substantial differences due to an unstable temperature condition since creation of reserve. A spring period was the shortest in 2013 – 64 days and had the greatest average daily temperature 11.9 °. Protracted a spring period was in 2002 – 123 days. The most of precipitations in a spring period

was fixed in 2008 – 196.2 mm, and the least in 2011 – 42.1 mm. A summer period in 2015 became the most protracted – 131 day. Moreover, the least protracted summer was in 2006 – 90 days. The warmest summer season was in 2010 with an average daily temperature  $19.8^{\circ}$ . The most raining summer was in 2007 when a 471.3 mm of precipitations is fixed, and the least raining summer was in 2002 (144.6 mm of precipitations). The most protracted autumn period was in 2006 – 107 days and the shortest one was in 2001 – 57 days. The warmest autumn was in 2004 when an average daily temperature reached  $9.2^{\circ}$ . The most of precipitations in the autumn period is fixed in 2009 – 178 mm, and the least in 2001 – 39 mm. The winter periods were protracted in 2004/05 and 2005/06. Their duration was 114 days. Winter period in 2009/10 with an average daily temperature  $-7.9^{\circ}$  was the coldest one. The most precipitations is fixed in winter 2005/06 – 208.4 mm, and the least in a winter period 2012/13 are a 52.2 mm. The most of precipitations for a year fell out 777.8 mm in 2012, and the least one in 2011 – 427 mm. The average long-term dates of the beginning of the year seasons are defined. The average long-term date of the beginning of the spring season is on February 27; the summer season is on May 26; the autumn season is on September 14; the winter season is on December 5.

*Key words:* Rivnenskyi Nature Reserve, seasons of the year, precipitation, climatic terms, temperature, long-term date.