

THE CHANGES IN MEADOW AND NATURAL PASTURE AREAS IN KAUNAS AND VILNIUS COUNTIES

Giedrė Ivavičiūtė

Vytautas Magnus University, Kaunas Forestry and Engineering University of Applied Sciences,
Klaipėda State University of Applied Sciences

The object of the investigation is Vilnius and Kaunas counties' meadow and natural pasture areas.

The objective of the study is to analyze the meadow and natural pasture areas of Vilnius and Kaunas counties from 2004 to 2024.

The condition of meadow and natural pasture areas in Vilnius and Kaunas counties.

In 2024, meadows and natural pasture in Vilnius county comprised 63,018.32 hectares, constituting 6.48 percent of the county's total area. An analysis of the area of meadows and natural pastures in Vilnius municipalities shows that the largest number of meadows and natural pastures is found in Vilnius (20,701.57 hectares) and Trakai (9,678.57 hectares) districts, while the smallest number of meadows and natural pastures is found in the municipality of Vilnius (3,417.26 hectares) (Table 1). In 2024, meadows and natural pastures in Kaunas County covered 33,527.58 hectares, accounting for 4.15 percent of the total area. It is evident that the highest area of meadows and natural pastures in hectares is determined in the Kasiadorys district - 7,682.83 hectares, while the lowest is in the Birstonas municipality - 489.34 hectares (Table 2).

Table 1
Meadows and natural pastures area in hectares and percent in municipalities of Vilnius county in 2024

Municipalities of Vilnius county	Meadows and natural pastures area in hectares	Meadows and natural pastures area in percent
Elektrėnai	6,168.38	12.13
Salcininkai district	5,151.19	3.45
Sirvintos district	5,348.89	5.91
Svencionys district	6,212.71	3.67
Trakai district	9,678.57	8.02
Ukmergė district	6,339.75	4.55
Vilnius	3,417.26	8.53
Vilnius district	20,701.57	9.72

Table 2
Meadows and natural pastures area in hectares and percent in municipalities of Kaunas county in 2024

Municipalities of Kaunas county	Meadows and natural pastures area in hectares	Meadows and natural pastures area in percent
Birstonas	489.34	4.02
Jonava district	3,544.52	3.76
Kasiadorys district	7,682.83	7.07
Kaunas	1,164.42	7.42
Kaunas district	6,256.13	4.18
Kėdainiai district	3,832.08	2.29
Prienai district	5,288.50	5.12
Raseiniai district	5,269.76	3.35

Changes in the area of meadows and natural pastures in Vilnius and Kaunas counties.

In Vilnius county the area under meadows and natural pasture in 2004 was 70,469.93 hectares or 7.24 percent. From 2004 to 2024 the area of meadows and natural pasture in Vilnius county decreased by 7,451.61 ha or 10.57 percent (Fig. 1). In 2004, Kaunas county had 42,285.30 hectares, or 5.23 percent, of its land covered by meadows and natural pasture. Over the period from 2004 to 2024, this area decreased by 8,757.72 hectares, constituting a decline of 20.71 percent.

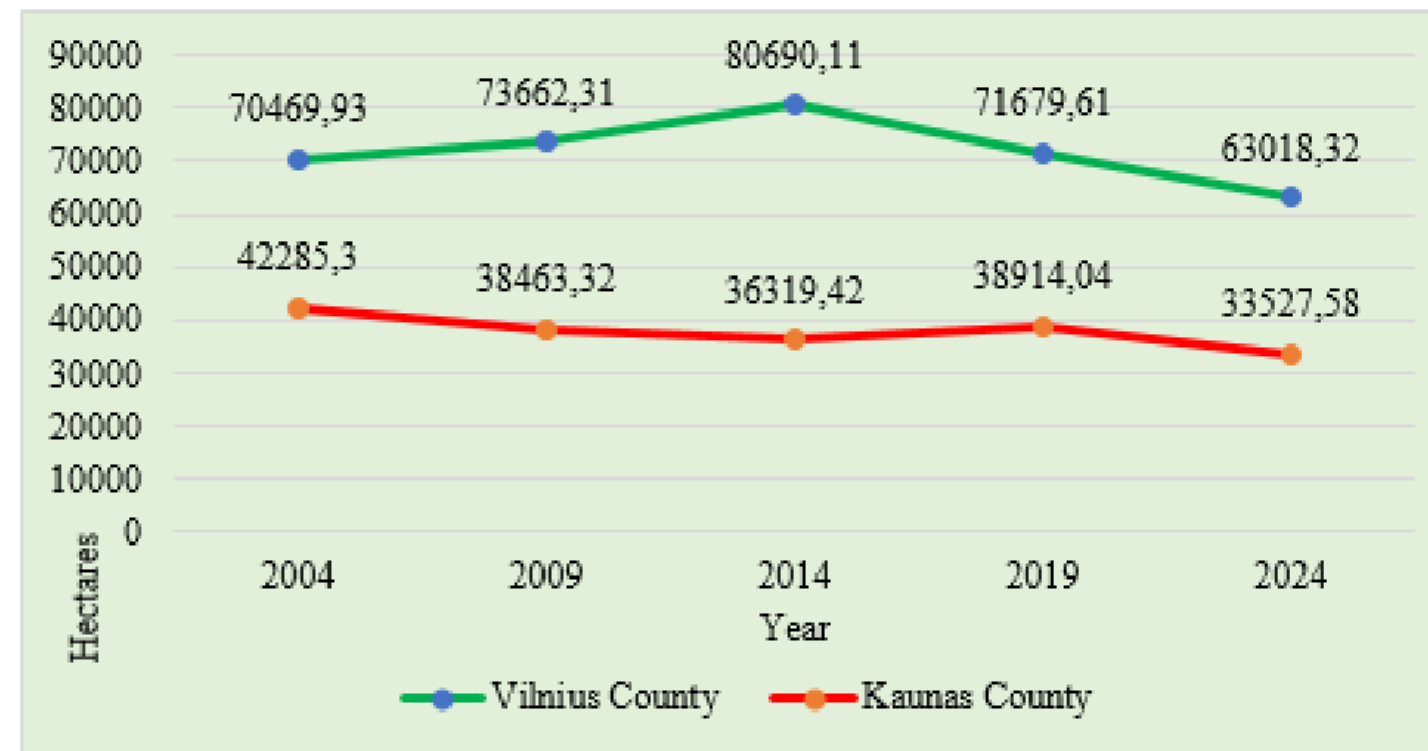


Fig. 1. Meadows and natural pasture area change in hectares in Vilnius and Kaunas counties in 2004-2024 (Nacionalinė žemės..., 2004-2024)

In Vilnius county, meadow and natural pasture areas increased in four out of eight municipalities, while in the remaining four, they decreased (Fig. 2). The largest expansion of meadow and natural pasture areas from 2004 to 2024 was observed in Vilnius municipality (2,192.52 hectares or 179.02 percent) and Trakai district (2,308.69 hectares or 31.33 percent) (Table 3). Among the four municipalities where the area of meadows and natural pastures decreased, the most significant change was identified in Salcininkai district (7,254.74 hectares or 58.48 percent).

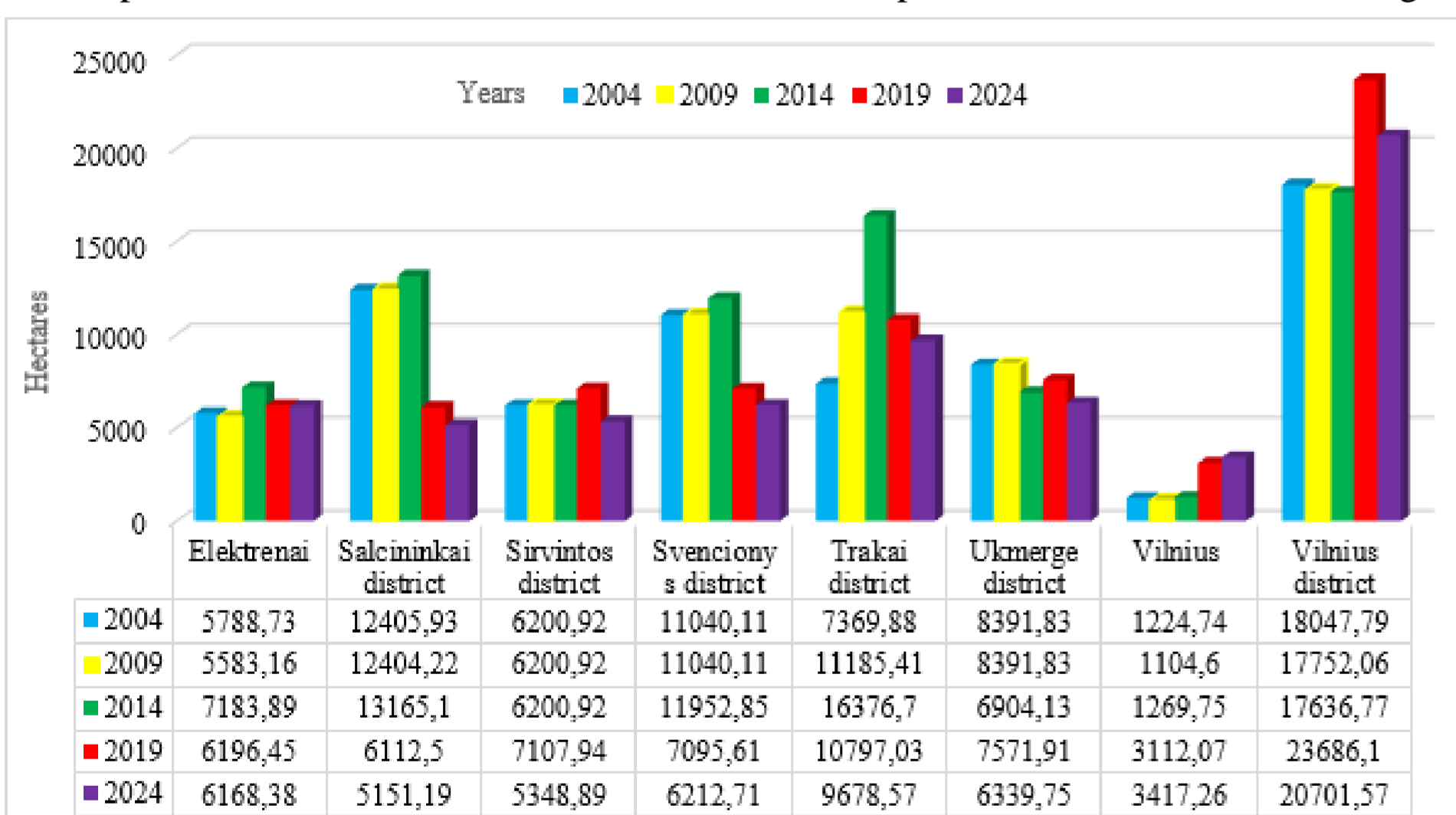


Fig. 2. Meadows and natural pasture area change in hectares in municipalities of Vilnius county in 2004-2024 (Nacionalinė žemės..., 2004-2024)

During the period from 2004 to 2024, the area of meadows and natural pastures increased in three out of eight municipalities of Kaunas county, while decreased in the remaining ones (Fig. 3). The largest expansion of meadows and natural pasture areas occurred in the municipalities of Kaunas city (957.76 hectares or 463.45 percent) and Kaunas district (2,465.19 hectares or 463.45 percent). Among the five municipalities of Kaunas county where a decrease in meadows and natural pasture areas was identified, the largest areas in hectares were lost in the municipalities of Raseiniai district (4,368.57 hectares) and Prienai district (3,831.96 hectares) (Table 4).

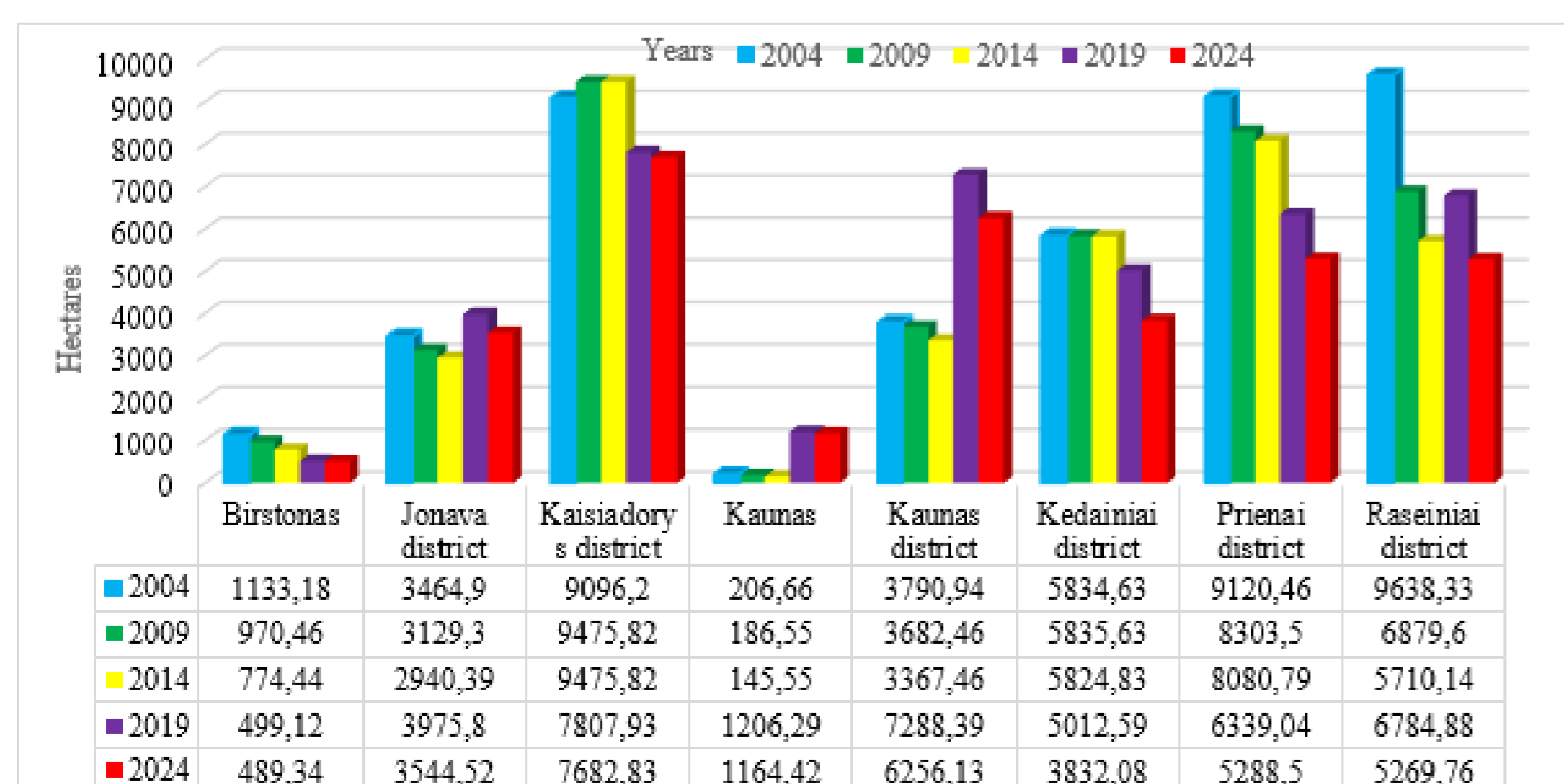


Fig. 3. Meadows and natural pasture area change in hectares in municipalities of Kaunas county in 2004-2024 (Nacionalinė žemės..., 2004-2024)

Table 3
Meadows and natural pasture change in hectares and percent in municipalities of Vilnius county in 2004-2024

Municipalities of Vilnius county	Meadows and nature pasture area change in hectares	Meadows and nature pasture area change in percent
Elektrėnai	+ 379.65	+ 6.56
Salcininkai district	- 7,254.74	- 58.48
Sirvintos district	- 852.53	- 13.74
Svencionys district	- 4,827.40	- 43.73
Trakai district	+ 2,308.69	+ 31.33
Ukmergė district	- 2,052.08	- 24.45
Vilnius	+ 2,192.52	+ 179.02
Vilnius district	+ 2,653.78	+ 14.70

Table 4
Meadows and natural pasture change in hectares and percent in municipalities of Kaunas county in 2004-2024

Municipalities of Kaunas county	Meadows and nature pasture area change in hectares	Meadows and nature pasture area change in percent
Birstonas	- 643.84	- 56.82
Jonava district	+ 79.62	+ 2.30
Kasiadorys district	- 1,413.37	- 15.54
Kaunas	+ 957.76	+ 463.45
Kaunas district	+ 2,465.19	+ 65.03
Kėdainiai district	- 2,002.55	- 34.32
Prienai district	- 3,831.96	- 42.02
Raseiniai district	- 4,368.57	- 45.32

Conclusions: 1. In 2024, meadows and natural pasture in Vilnius county comprised 63,018.32 hectares, constituting 6.48 percent of the county's total area. In Kaunas county, these areas covered 33,527.58 hectares, accounting for 4.15 percent. 2. From 2004 to 2024 the area of meadows and natural pasture in Vilnius county decreased by 7,451.61 ha or 10.57 percent. 3. In Kaunas county, over the period from 2004 to 2024, meadows and natural pasture area decreased by 8,757.72 hectares, constituting a decline of 20.71 percent.