

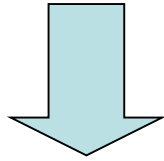
# GAME KEEPING AND GAME TENDING

Ing. Radim Plhal

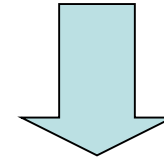


INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

# Universal game care provided the whole year



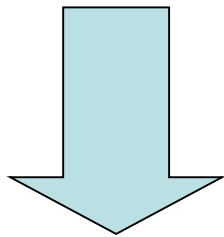
Venison and trophies produce



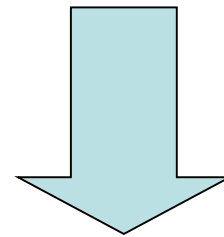
Minimize damage to agriculture and forestry



- High density of population



- High demand for hunting and venison



**Sophisticated game management**

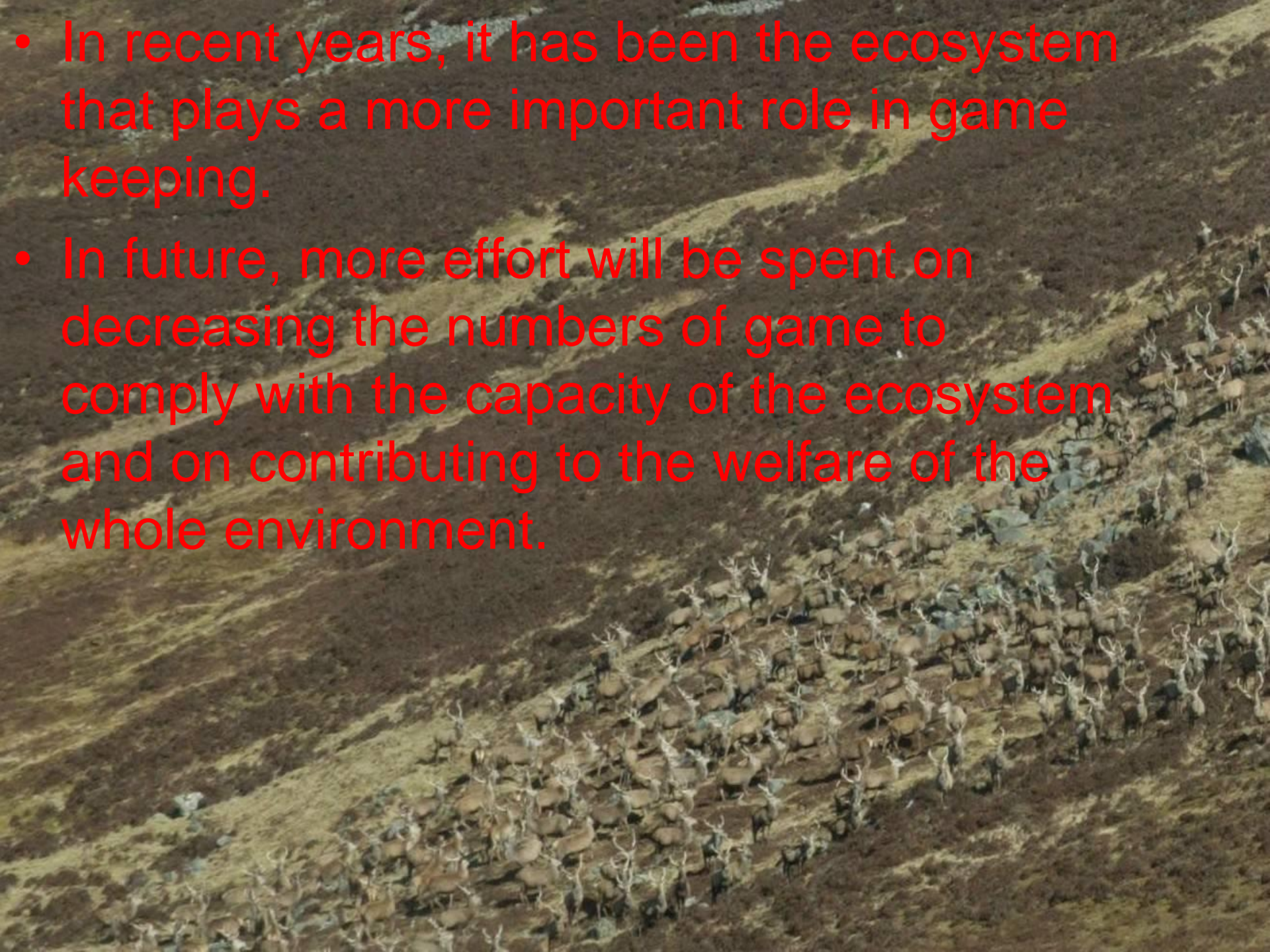
# Game keeping and tending activities

- regulation of the game stock
- providing food at the time of famine
- selective culling
- environmental care in the area
- protection against predators

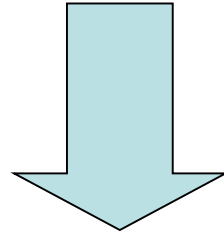
✓ The principle of this form of game management originates in the fact that wild life populations reach only the size consistent with the capacity of their environment;

✓ hunting thus removes only part of the increment and has only little impact on the natural process.

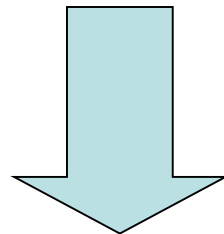
- In recent years, it has been the ecosystem that plays a more important role in game keeping.
- In future, more effort will be spent on decreasing the numbers of game to comply with the capacity of the ecosystem and on contributing to the welfare of the whole environment.



- Game is managed in hunting areas – own or rented – in 10-year periods.



- Long-term management of the same hunting area - sustained game tending



- The most important task of each user is to maintain a reasonable life stock, especially of hoofed game.

# The most significant factors regulating the quantity of game stock and its interaction with the environment include:

- ✓ changes of forest vegetation
- ✓ agricultural management
- ✓ absence of big predators
- ✓ feeding in winter
- ✓ insufficient cull





These factors caused the number of game stock to rise in Central Europe as a whole,



and the absence of intensive cull

threatens with the destruction of the environment and huge damage to forest stands



The regulation of game stock is planned for each hunting area and takes into account the prescribed and real stock.

The prescribed stock is the optimum number of game set by authorities (state organs for game management) for each hunting area.

Normované stavy spárkaté zvěře

Počet jedinců na 1 000 ha plochy, na kterou se spárkatá normuje

Jakostní třída honitby	jelen evropský, sika	daněk skvrnitý, jelenec běloocasý, muflon	kamzík horský	srnec obecný		souhrnný počet ks spárkaté zvěře	prase divoké
				les	pole		
I	26	46	99	122	56	39	16
II	22	36	63	96	48	31	13
III	16	27	39	64	40	22	10
IV	11	20	24	32	36	14	7

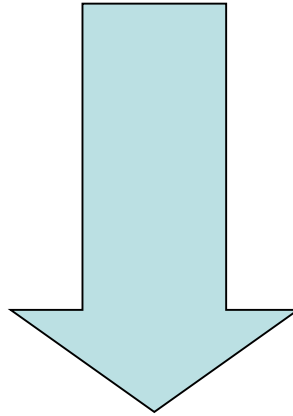
The real stock is established in a census during the spring months.

The cull is than calculated using the coefficient of expected production to make the game stock in the spring of the next year equal the prescribed stock.

KOP pro spárkatou zvěř

Druh zvěře	Daněk skvrnitý	Jelen evropský	Jelenec běloocasý	Kamzík horský	muflon	Prase divoké	Sika Dybovského	Sika japonský	Srnec obecný	
									les	pole
KOP	0,8 - 0,9	0,7 - 0,8	0,6 - 0,7	0,2 - 0,3	0,8 - 0,9	3,2 - 4,5	0,8 - 0,9	0,8 - 0,9	0,8 - 1,2	0,5 - 1,0

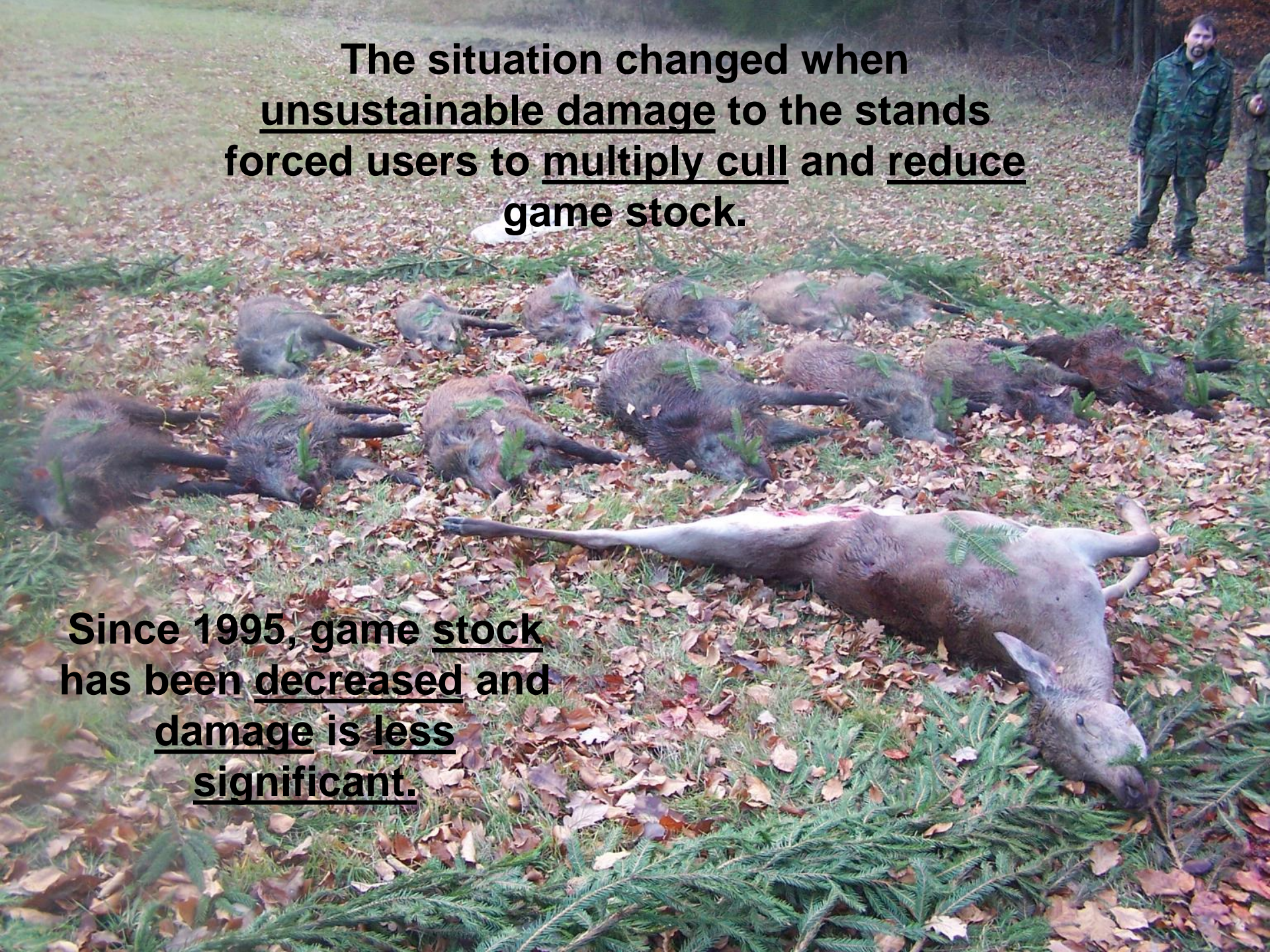
At the past time the prescribed game stock was set low, the user reported numbers the same as the prescribed game stock, which resulted in the growth of the numbers of real game stock.



For several consecutive years, the cull was higher than the census and the prescribed game stock.

The situation changed when unsustainable damage to the stands forced users to multiply cull and reduce game stock.

Since 1995, game stock has been decreased and damage is less significant.



**The management employing the census is not functioning properly, it is still being used and it is also provided for in the hunting legislation.**

**An alternative – still not adopted – is to set the cull according to different criteria of the condition of the environment.**



**The condition of the ground cover is taken into consideration and the cull is then set from previous experience.**

**More damage means higher cull.**

# CENSUS (estimation of the game population density)

- Census should be done with responsibility, repeatedly and employing different methods in order to provide the most accurate result.
- The accuracy of the census depends on experience of the users of hunting areas.
- It is appropriate to count on more dates and to combine the methods taking into consideration the knowledge of the biotope.



**Hoofed game is counted at the end of winter or at the beginning of spring when the conditions are optimal for good results.**

**Game is concentrated in winter groups on smaller areas and moves around only little.**

**The snow helps too.**



The methods depend on the experience and on knowledge of the biotope.

The most common methods are counting near the feeding places, direct observation or counting the tracks in the snow or in transects, counting while stalking through the area or driving the game out of the forest.



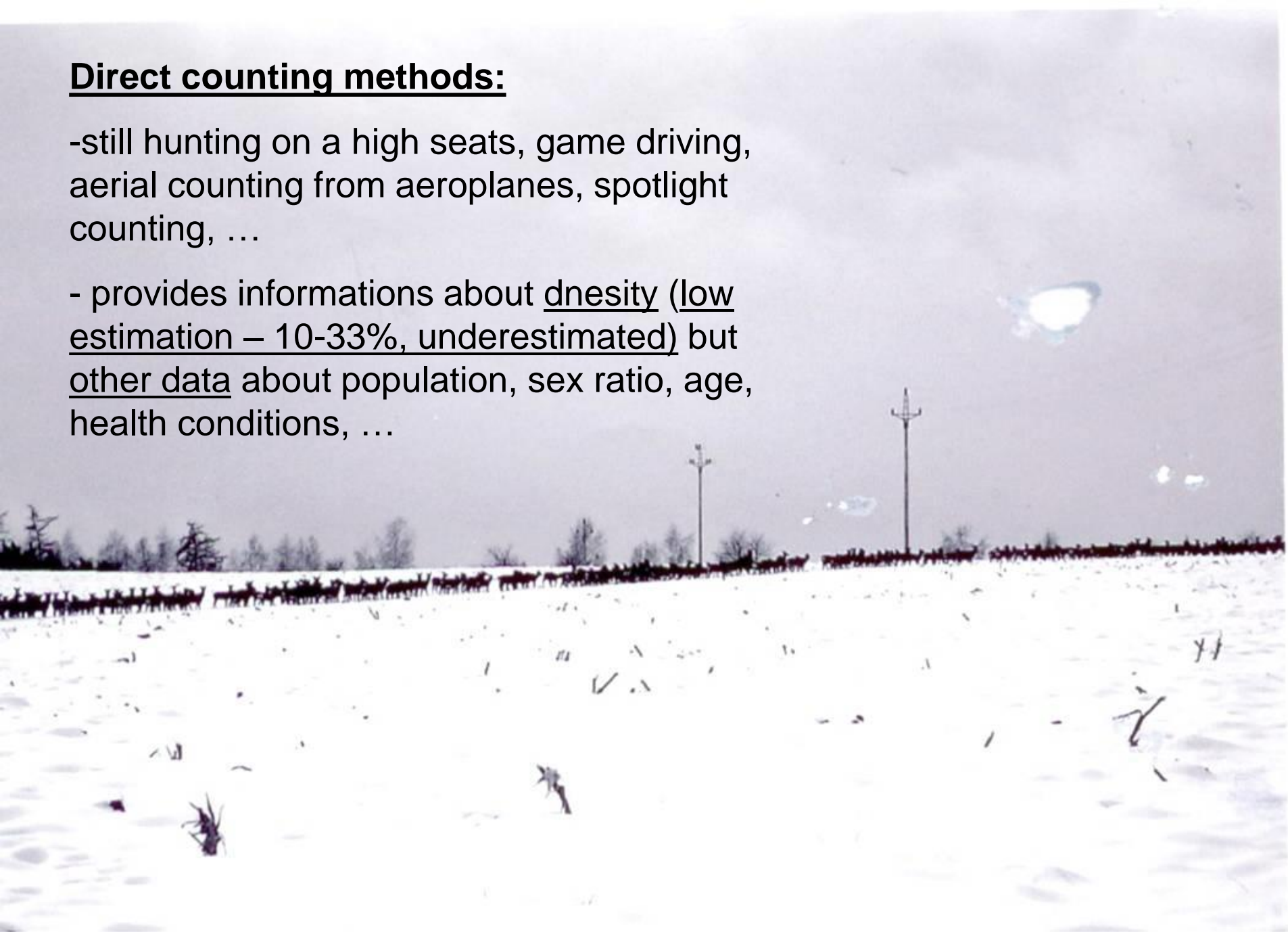
**Other methods, like counting from airplanes or counting droppings (faecal pellets group) on clear areas are too time- and equipment-consuming and therefore seldom used.**



## Direct counting methods:

-still hunting on a high seats, game driving, aerial counting from aeroplanes, spotlight counting, ...

- provides informations about density (low estimation – 10-33%, underestimated) but other data about population, sex ratio, age, health conditions, ...







## Indirect counting methods:

- snow tracks, faecal pellet groups, bark stripping, browsing, rut calling,...
- census can be overestimated or underestimated
- no information about age, health, sex,...





**The users should also count small game (hares and pheasants) in the spring, and in the summer before the start of the season, and then calculate the cull.**

The situation of small game is the completely different.

In comparison to the number of hoofed game the number of small game is very low – often on the verge of not being shot at all – and it is high quality census that can reverse the situation.





# GAME MANAGEMENT ACT No. 449/2001

- GAME MANAGEMENT PLAN

§ 36

Elaboration of the plan:

The hunting area user shall carry out the game census in the hunting area every year as to the date fixed by the state organ of game management and shall notify in written of the result the competent state organ of game management within 5 days.

The hunting area holder and holders of adjacent hunting areas shall have the right to participate with their representatives in the census and to comment on its results to the state organ of game management.

- The elaboration of the plan shall be based on the:
- assessment of the general condition of the ecosystem,
- result of comparison of control and comparative plots
- degree of damage caused by the game to forest and agricultural stands in the past period,
- game census results,
- set minimum and prescribed game stocks, sex ratios and coefficients of expected production and on the aims that are given in the application for the hunting area recognition.

# The part concerning the game management shall indicate:

- planned stocking,
  - construction of game management facilities,
  - measures of the care of game
  - of the protection and improvement of living conditions for game.
- 
- If the hunting area is located in the area of game keeping, the plan shall be based on conclusions and recommendations of the state organ of game management that defined the respective area of game keeping.