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Fenorhythmes Of Yakut Taiga. The Calendar Of The Nature Of Olekminsk Reserve.

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一等獎

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Abstract

“Natural phenological per iodization of a year is called nature calendar…”

The role of rivers in nature and man’s life is great. They connect people and cultures, form climate, give life to the thousands of living beings.

In the tasks of researches there were:

1. To determine the peculiarities of seasonal dynamics of alive and inanimate nature of Olekminsk reserve;

2. To find out (to reveal) the peculiarities of phenological seasons of the territory of Olekminsk reserve.

_ To determine of phenoindicators which are separate from phenological seasons

_ To establish the middle dates of the advance of phenological phenomena

_ To determine the duration of phenological seasons of a year.

According to the general nature of plants the territory Olekma-Amga interriver refers to the provincial of pine-needles taiga zone, to Verkhne-Lensky flora area. Predominating part of the plants of the reserve relates to boreal types. The flora of the superior plants of Olekminsk reserve includes 654 types. The fauna of area is presented by 40 types of mammals from 45 living in the south of Yakutia, 187 types of birds, 2 types of amphibians and 2 types of reptiles.

Besides, phenological researches were conducted on the testing area of school ecological control and during arranging of field ecological schools since 2000 till

2010.

In all 169 phenological phenomena were analyzed from different phenological seasons of year for the last seven years. The gross amount of analyzed information composed 4000 information units.

Results and conclusions:

1. The peculiarities of the seasonal changes of natural complexes were determined for the first time for south of Yakutia on the example of the territory of Olekminsk reserve. The calendar of the nature of Olekminsk reserve was composed. The analysis of phenological observations allowed establishing the row of phenoindicators, with the help of which we can determine advance of that or either phenological stage, as well as the disposition of current vegetative period can be forecasted. The information maybe used in organizing of the measures of nature protection, struggle with pests and the diseases of useful plants, parasite and tranmissive diseases of man and home cattle.

2. Geographic position and climatic peculiarities of territory form the peculiarity of seasonal rhythms of Olekminsk' reserve's nature.

3. All components of landscape in its seasonal changes tightly are connected with each other with causative-investigation ties having formed the definite complex of characteristic phenomena per the stage of seasonal development.

4. The carried out analysis of the primary materials of the Annals of the nature of the reserve and information from the field of ecological schools for seven years since 2001 till 2007 allowed detecting the peculiarities of phenoclimatic seasons of the territory of Olekminsk reserve.

5. Phenological and temperature outsets of phenological stages were determined.

6. Intervals and average of many years dates which are characteristic for phenological phenomena are determined.

7. The calendar of the nature of Olekminsk reserve was made on the basis of the processed information.

評語

本研究是對俄國 Olekminsk 保護區進行長期之生態觀測調查，並由龐大之紀錄資料建立一套動態資訊，充分顯示研究者對自然環境之熱愛，和對生態調查之完整訓練。