

Study on the Role of Forest Pest Control in Forestry Ecological Environment Construction

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Abstract: Forest plants and forest types are rich and varied, but due to the influence of natural conditions, average forest area, regional distribution and other characteristics and factors, as well as threats and troubles brought by forest pests, the healthy development of ecological forestry is restricted. In the development of modern forestry, pests are an important part of disasters, which will have a serious negative impact on the development and construction of forestry ecological environment, and also have a greater restrictive effect on China's socialist modernization. Forestry pests not only affect the ecological restoration and environmental construction of forests, but also directly restrict the healthy development of forestry ecological resources and bring serious threats to the sustainable development of forests. Based on this, this paper analyzes the forest pests and their control, and discusses the position and role of forest pests control in the construction of forestry ecological environment.

1. Introduction

China's climate and geographical environment are suitable for the growth of trees, but the specific environment of each region is different, so there are certain differences in the types of forest plants, and the forest coverage area in some areas is small, so the sustainable development of forests is particularly important [1]. Forestry pests destroy the construction effect of forestry ecological environment, which is very unfavorable to the sustainable development of forestry ecological environment [2]. Therefore, it is extremely urgent to do a good job in pest control at present, which requires relevant departments to give full play to their authority functions and take effective measures to minimize the adverse effects of pests [3]. In the process of forestry ecological environment construction, forestry pests are harmful, and the control tasks are complicated and arduous [4]. Forest plants and forest types are rich and varied, but due to the influence of natural conditions, average forest area, regional distribution and other characteristics and factors, as well as the threats and troubles brought by forest pests, the healthy development of ecological forestry is restricted, and forestry ecological construction and protection are particularly important [5]. Forestry resources have been damaged by harmful organisms, which has seriously restricted the development of forestry ecological environment. China is increasing investment and using pest control methods to protect the forestry ecological environment, so that China's forestry ecological environment is in a healthy and stable development state [6].

In the new period of social development, it is necessary to focus on strengthening the construction of ecological environment. Relevant administrative departments should take targeted prevention and control measures according to the current situation of regional pests, comprehensively enhance the integrity and diversity of forestry ecosystems, and improve the benefits of ecological environment construction and ecological benefits [7]. The forest protection industry team should fully understand the huge ecological and social functions of forestry in the new period, vigorously strengthen the protection of forest resources and the comprehensive management of forest pests, develop and manage healthy forests, enhance the ecological carrying capacity of existing forests, and realize the sustainable management of forests and the sustainable control of pests [8]. Forestry ecological construction and protection have played an important role in improving the living space of human beings and the sustainable development of social economy, and it is also an indispensable and important work for the prevention and control of forest pests [9].

In this paper, the forest pests and their control were analyzed, and the position and function of forest pests control in forestry ecological environment construction were discussed. In the future development process, we should focus on the prevention and control of forestry pests, give full play to its role in the construction of forestry ecological environment, and maintain the good development of forestry ecosystem.

2. Effects of Forest Pests on Forest Ecological Environment

In the process of China's forestry development, there are serious forest pests such as poplar stem borers, pine caterpillars, pine leaf peaks and forest rodents. The existence of these diseases will have a great impact on the forest environment, and then damage the climate of the whole region, affecting people's lives and the quality of trees. Because of the change of regional climate and forest diversity, the forest is being threatened by serious pests and diseases, which will bring huge losses to the forest and affect the growth of trees. Because pests like to eat young plants, this habit causes irreversible damage to the restoration and growth of forest vegetation. Regional climate and forest diversity change have become two reasons for the wanton propagation of pests and diseases, which not only affects the normal growth of trees, but also eats some young plants, which brings serious harm to the sustainable development of forests. Due to the destruction of forest ecosystem and poor plant diversity, when forest pests occur, forestry workers can only achieve the purpose of forest pest control by spraying pesticides. After pesticides enter plants, they will also cause physiological changes in forest plants, which makes plants more sensitive to attacks by hosts or predators, thus making other plants more vulnerable to pests.



Fig.1 Pine Caterpillar Control

Because of the regionality and diversity, the forest suffers a certain degree of pests and diseases, which cause great losses to the forest. Most of the pests like to eat young plants, thus causing irreversible damage to forest restoration and tree growth. In the past, pest control generally relied on manual means, which was not only inefficient, but also consumed more manpower and material resources. With the development of commodity economy, communication activities increase, so pests have the opportunity to spread, which may turn into a disaster. Although the important role of scientific protection of forestry resources has been paid attention to and strengthened by the current management departments, many shortcomings still exist, such as the species and diversity of forest trees have not been effectively improved, and the scope of afforestation and returning farmland to forests is limited, so that the problem of pest outbreaks continues to occur and has not been effectively controlled [10]. The problems in people's ecological environment are directly related to the destruction of forests. In order to improve the living environment, it is necessary to strengthen the construction of forestry and improve the ecological environment. Although it has achieved a particularly high control effect on pests, it is difficult for pesticides to decompose and be eliminated by nature, which leads to some pesticides penetrating into the soil, thus causing certain damage to soil microorganisms and protozoa in the forest, and also causing serious damage to plants, and finally causing very serious damage to the forest ecological environment system.

3. The Positive Role of Forestry Pest Control in the Construction of Forestry Ecological Environment

3.1 Guarantee the Environmental Development Benefit of Forestry Ecosystem

Since the reform and opening-up, people have gradually realized the importance of protecting forest resources. However, when protecting forest resources, too much emphasis was placed on coverage and the protection of forest diversity was neglected, which led to the decline of forest vegetation diversity. Among forestry resources, one belongs to economic forest, and the main purpose of planting economic forest is to carry out production and management, so as to realize the growth of farmers' economic benefits. The existence of economic forest can not only protect the existing environment, but also improve people's quality of life. Therefore, the prevention and control of pests in economic forest can reduce the occurrence of many diseases and insect pests, thus bringing more beneficial effects to the development of the region. Forest trees can adjust the ecological environment and climate to maintain the ecological balance, and forestry plays an important role in regulating the ecology of the whole earth. Once pests are not effectively prevented and controlled in the process of forestry growth, trees will dry up and die, forest coverage rate will be reduced, and water resources will not be effectively conserved, which will lead to soil erosion, soil desertification, severe natural weather and adverse impact on the environment. Forestry ecosystem can also bring certain social news, which is very recognized by the public. In forestry ecosystem, not only ecological benefits can be brought into play, but also economic and social benefits can be brought into play. Compared with social benefits, economic benefits and ecological benefits, it has more value. In order to promote the healthy development of forest and reduce the impact of forest pests on forest ecological environment by artificial intervention, we need to strengthen the natural prevention and control skills of forest pests, carry out comprehensive management of forest pests and do a good job in building forest ecological environment on the premise of protecting the environment.

In the process of forestry development, it is necessary to prevent and control the erosion of harmful organisms, and the forest system is also an essential system in the earth, which can effectively regulate the respiration of the earth. Compared with the ecological environment of tropical rain forest, the effect of forestry ecological environment is not particularly outstanding, but it has also become an important part of forest resources, which can effectively regulate the local climate, and its strength should not be underestimated. Forestry is attacked by harmful organisms, which can also reduce the extinction of plant species, reduce plant species and destroy the integrity of ecosystem. Therefore, at present, it is necessary to strengthen the prevention and control of forest pests to enhance the regulation of forest resources on climate and environment, maintain the development benefit of ecological environment and maintain the integrity and diversity of ecosystem. The reduction of forestry resources will also enhance the erosion of the ground by rainwater, which will lead to the occurrence of soil erosion. Therefore, the orderly and healthy development of forestry system plays a very important role in regional environmental governance. Once it is invaded by harmful species, it will affect the effective play of environmental role. In order to achieve this goal, in order to improve the afforestation quality in the process of afforestation, we should not only pay attention to the afforestation area, but also increase the construction of multi-variety forest areas with diversified forest species, improve the self-regulation and prevention and control of forest diseases and insect pests, and reduce the spread speed of insect pests in forests.

3.2 Improving the Economic and Social Benefits of Forestry Ecosystem

In the work of controlling forest pests, we should aim at maintaining the diversity and integrity of forest ecosystem. However, at present, in China's forestry ecosystem, harmful organisms have seriously eroded the forestry ecological environment, resulting in the continuous reduction of forestry resources. Once the forestry resources are reduced, other organisms in the forestry ecosystem cannot survive and multiply. Plants in forestry ecosystem absorb a large amount of carbon dioxide in the air through photosynthesis, and release a large amount of oxygen at the same

time. Using forestry ecosystem to absorb carbon dioxide in the air can avoid the greenhouse effect caused by carbon dioxide, so as to adjust the earth's climate and help the growth of different species. Economic forest development is an important model of forestry development. By developing economic forest construction, many jobs can be brought to society, the economic income of local growers can be increased, and higher social and economic benefits can be achieved. Therefore, it is necessary to do a good job in pest control and management, strengthen forestry construction, ensure the full growth of economic forests, and create higher economic benefits for the society.

It is necessary to increase the construction of ecological environment in forest areas, use appropriate technical and administrative measures as far as possible to control the population of harmful organisms below the allowable level of economic damage, and increase the protection of beneficial insects and birds. It is also necessary to strengthen the protection of forest resources so as to ensure the regional climate. Special climate is an important inducement of forest pests, and forest is an important measure of regional climate regulation. In the process of returning farmland to forests in many areas, fruit trees are planted on the land where crops were originally planted, so as to build economic forests. Farmers can quickly increase their income by selling fruits to different areas. At present, the main fruit trees planted on cultivated land in China include peach trees, pear trees and apple trees, etc. Fruit trees can not only create income for farmers, but also enrich species in local forestry ecosystems, highlighting the diversity of forestry ecosystems [11]. To strengthen the management of forestry pest control, it is necessary to plant suitable tree species according to the actual situation of forestry ecosystem. By planting different types of tree species, the forestry ecological resources can be enriched, thus creating a stable and healthy living space for all kinds of organisms in the forestry ecological environment and contributing to the stability of forestry ecosystem.

4. Conclusions

In recent years, during the actual construction and development of forestry ecological environment, some problems often occur under the influence of pests, which can not ensure the construction effect of forestry ecological environment and adversely affect its sustainable development. Forestry ecosystem can bring certain economic, social and ecological benefits into play. Therefore, it is necessary to eliminate the possible impacts of some harmful organisms on forestry ecology, ensure the diversity and integrity of ecosystem, and make forest construction move towards sustainable development. In the process of forestry ecological environment construction, aiming at the problem that pests erode the forestry system, it is necessary to adopt scientific control methods according to the actual situation of forestry ecological environment, so as to effectively control pests. In the new period, forestry departments and forest farms should put pest control and insect resource development in an important position, and pay close attention to it to ensure the sustainable and healthy development of forestry ecological environment construction. Relevant departments should fully consider the important role of forestry development in ecological environment regulation and maintaining the stability and diversity of ecological environment, as well as the social and economic benefits generated, and strengthen the prevention and control of harmful organisms in the long run.

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