

Application of new technology in pest control of forestry

Qi shiheng , Dong ji , Sun he

Qilian Nature Conservation Station, Qilian International nature reserve , Gansu Wuwei 733000

Abstract: Forestry is People's life , Social Development , important content for environmental protection . with the continuous development and progress of science and technology , Forest Pest prevention work to be replaced by new technology , by using remote sensing , Geographic Information systems and High-tech technologies such as global Navigation satellite systems , strengthens the forest Survival and growth protection . This article describes the new technology theory ,features , , focuses on analyzing remote sensing technology , Geographic Information technology , navigation system and things networking technology 5 Item Technology , provides reference for strengthening research on new technologies of forest Pest Control .

Keyword: High-tech ; Forest Pest ; Census

Figure category number in : S 763 Document identification code : A DOI: 10.11974/nyyjs . 20151033086

Forestry Pest mainly according to , Related biological type , Distribution , features , laws, etc. categorize and nonporous , counts its data , To organize , and analysis calculations , and summarize final results [1]. because forests are located in the locations are different, so , Forestry Pest with its geographical environment and the The location has important associations .

1. Application of remote sensing technology

Remote Sensing mainly refers to the remote observation technology without contact , is the package is surrounded by : sensor , remote sensor , electromagnetic waves and radiation and other remote probes , with specific material performance , Character and form analysis and collation of a type Science and technology [2]. century age, Our National Academy of Forestry begins with navigation blank video technology , Video recording of the whole forest area through the camera , at the same time , through effective use of remote sensing image processing system , to be filmed to a related graph like processing , And then make an image to reflect the harmful in the forest areabio area . with the development of science and technology , USA on century year age Mid-term development of avionics delineation technology , by using remote sensing ,GIS and GPS A combination of technologies , can quickly , accurate access to disaster data Line reflects . and until 2006 year China's Hunan province began to adopt avionicsdelineation system , gradually improve and improve China's forestry control effectiveness and remote Sense Technical vacancy , Enhanced monitoring capacity of forest pests[3].

2. Application of Geographic information technology

Geographic Information systems combine multiple disciplines into , includes , geography , map Science , subjects such as remote sensing technology and computer science , and is widely applied to different collar through a scientific and rational combination and use of , domain , and can be truly reflected by using the computer system data information [4]. For example : Specific distribution areas of forest pests and type distribution . Although the current .

Copyright ©

This is an open-access article distributed under the terms of the Creative Commons Attribution Unported License

(<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

geographic information technology software development is more , But its specific partition is 2 Large

class , Processing data by using the geo-information technology system ; Is at the root of the geographic information system , to 2 Times developed nonporous new system . in European developed countries , Geographic Information Department is more used for environmental protection , disaster prediction , and city planning, etc. face

3. The application of the navigation system

Navigation Satellite System is the most widely used in the world 1 Way , main to include the : United States GPS , Russian GLONASS, China's Compass and EU's Galileo etc ^[5] . at the same time , Navigation Satellite system also

widely used in the prevention and control of forest pests . , century early , China's forestry pest control monitoring began to use GPS receiver , its mainly works with , location determination and related data collection of hazardous biological hazard areas , disaster Area Route records and investigation supervision , take aircraft monitoring of affected areas and prevention work and aircraft monitoring data logging and evaluation . for a better fully implemented navigation satellite systems technology Applications, specific for different areas requirements , Develop and design specific application software to meet production and admin .

4. Application of the Internet of things

IoT Technology is a concrete reflection and important part of the new information technology of the modern times 6 ^[1] . Forest Pest control networking is primarily a front-end perception , pass and back-end application control combine and correlate , where sensors and bit , back-end image and text data processing are the focus of the current technology , through Specific application of these technologies , The reflects the soil in the forest area part , moisture and plant leaf physiology in forest area data information . use sensor technology and data collection in IoT technology in our country before technology is still A problem, should be for related issues , Strengthen forestry has Research nonporous of pest control field .

with the popularization and development of computer network technology , Modern High-st Learn about Technologies , Forest Pest control represented by new technology the domain has new innovations . main information Technology , through New energy combination of technologies with biotechnology , pushing forest pest control to new technology -oriented. New technology constantly changes people's lives and working environment , also , also improves forestry growth and environment in depth , for people to live and social development provide security .

References

1. Wu Hong Dares , Stone into , Chillia . Is based on the WorldView -2 Single-woody growth monitoring for data probing J] Remote Sensing information ,2013(5): 64-68.
2. Wu Jian , Ma Xiaoming . Application of Aerial video remote sensing technology in monitoring forest diseases and pests [J]. Forestry Science research , 1994, 7 (5): 579-584.
3. Wu Hong Dares , Changyuan Fly , recommendation . Remote Sensing monitoring system for forest pest disasters and its application with [M]. Harbin : Harbin Map Publishing house , 2010:1-101.
4. Wu Hong Dares , Wang yang , Changyuan Fly . Is based on the GIS / GPS Forest Pest monitoring data record system [M] . Harbin : Harbin Map Publishing house ,2009:1-3.
5. Guo Yanzhong , ng lai wo . establishing a closed-loop management system for crude oil transportation based on IoT solution original Oil theft problem [J]. China Management information ,2013:56-59.
6. Wu Hong Dares , Changyuan Fly , Welcome to . Is based on the GIS Forest Pest Data management system [M]. Harbin : Nefu Publishing house , 2012:15-25.