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SOUTH AMERICA SPECIAL

Preface

The South America Special of this issue of IFFN is partially an extract of the FAO Global Forest Fire Assessment 1990-2000 that includes country reports from Argentina, Bolivia, Brazil and Chile. The introduction to the regional South America fire assessment as well as two summaries on the fire situation Uruguay and Venezuela have been authored by Robert W. Mutch. Two new country reports have been added in this IFFN Special, an update from the Roraima Region in Brazil and the first report about the fire situation in Colombia.

Introduction

Fire as a land use tool is deeply rooted in the culture, society and traditions of most countries in the region. Fire has been used to prepare agricultural lands for crops or grazing, open impenetrable lands to new agricultural uses, facilitate hunting, or for maintaining an open nature to the landscape.

Without exception, country fire officials throughout the Southern Hemisphere believe that uncontrolled wildfire is fast emerging as a major concern. This was a recurring theme in the presentations offered at the 1st South American Seminar on Control of Forest Fires, Belo Horizonte, Brazil (Ribeiro et al. 1998). The continuing use of fire for land-use practices, population pressures and a decrease in the economic stature of many of the people in the region are primary causes for the increase in the wildland fire problem (Yegres 1998).

The exact scope of the problem is difficult to determine. Fire statistics in many cases are non-existent, significantly incomplete, or misleading. There is not a common understanding or definition of what constitutes a wildland fire. Reviewing available statistics suggests that 50 to 95 percent of wildfire starts in the region are the result of agricultural burns or land clearing burns escaping control. Agricultural burning has been occurring for so many centuries that little concern is registered regarding vast quantities of smoke, or when many hectares are on fire. Satellite imagery cannot differentiate the unmanaged and uncontrolled wildfires from the controlled burns. During the early months of 1998, satellite imagery heightened government and international awareness regarding the vast number of “hot spots” in the region.

Economic, ecological and human losses can be measured monetarily as they affect local economies or by the loss of lives or real estate. Many countries have established plantations for future wood fiber needs. These plantations are at risk. Venezuela has found that as the plantations become more widespread, the risk of loss increases (Yegres 1998). Chile (Sanhueza 1998) has been proactive in the fire management program, since the creation of their vast plantations. They have an excellent fire management programme in cooperation with private industry.

Brief fire situation profiles follow for Venezuela and Uruguay based on presentations given at FAO's "Meeting on Public Policies Affecting Forest Fires" in Rome, Italy, October 1998. Longer reports prepared by correspondents will highlight fire programmes in several additional South American countries.

Uruguay

Ninety percent of Uruguay is classified as grasslands (Baptista 1998). Fire is used to improve forage for cattle. Fires do escape control and move into other lands, protected-forested areas, or into plantations. Due to the vastness of the grasslands, Uruguay does not have a serious forest fire problem.

The first forestry Law was passed in 1968 and the second one passed in 1987. The laws attempted to discourage the cutting of indigenous forest species and encouraged the creation of artificial forests. Today there are approximately 310,000 hectares of plantations. Fire problems began to rise as the number and expanse of plantations increased. When the programme started and plantations were isolated, the fires were manageable. As the plantations aged and increased plantings placed more plantations adjacent to one another, the fire problem became more serious.

Fire suppression is the responsibility of the Director of National Firefighters. There are approximately 1,500 firefighters. These firefighters are divided into fire brigades. Initial attack is primarily done by the industrial forest land owners in the plantation areas. When the situation is severe, the Public Works Department and the Defense Ministry become involved. There are no aerial resources for suppression. Aerial detection is employed.

Venezuela

The forestry Law of 1970 placed fire control responsibility in the Ministry of Environment and Renewable Natural Resources. The fire control programme is designed to support local organizations through central operation's centres which provide transportation, food, equipment, etc. There are regional examples of excellence where there are economic incentives to prevent and control wildfires. Venezuela's suppression effectiveness was demonstrated by their involvement with helping Brazil during the fire events of early 1998.

Venezuela is predominantly classified as tropical. Natural fire causes are rare, thus the fire problem is a human problem. The dry tropical forests are considered those at greatest risk. There is tremendous population pressure in these areas. A rise in fire occurrence is expected (Yegres 1998).

The eastern portion of the country has experienced a rise in plantations. The programme began in 1969 through a major governmental forestation programme. There are approximately one half million hectares of plantation. This is a region of high lightning occurrence, thus there is a high risk of fire starts and fire loss. The potential economic impact to these plantations gave rise to fire control efforts.

There have been large fires in the recent past. There is a system of detection towers, aerial detection, ground patrols and trained firefighting crews. Helicopters are used to transport firefighting personnel. The program is well defined in this region. Largely due to the potential economic loss, there are many trained professionals performing the firefighting duties (Yegres 1998). More than a dozen fire technicians have taken advantage of training opportunities internationally. Yegres (1998) commented that many of the trained professionals have other duties and do not have the time to devote fully to wildfire management.

References

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