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SOUTHERN FOREST PEST REPORTER

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UNITED STATES
DEPARTMENT OF AGRICULTURE
FOREST SERVICE
SOUTHERN REGION

BRANCH OF FOREST INSECT
AND DISEASE CONTROL
FIELD OFFICES

ASHEVILLE, N.C.
MACON, GA. ALEXANDRIA, LA.

Number 3

50 SEVENTH ST. N.E. ATLANTA, GEORGIA 30323

August, 1963

SUMMARY OF CONDITIONS

- ... Southern pine beetle populations are at a lower level than at this time last year. Heavy losses are still occurring in some areas, and a high biotic potential still exists.
- ... The black turpentine beetle populations are on an uptrend in the Gulf States.
- ... Ips activity was reported west of the Georgia state line and in the fringe areas of the southern pine beetle outbreak in North Carolina.
- ... Reproduction weevil activity in coastal North and South Carolina is expected to reach new heights when the fall brood emerges.
- ... Elm spanworm populations in Georgia and North Carolina declined in 1963. Forest tent caterpillar defoliation of hardwood increased in Louisiana and Alabama.

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STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, Dendroctonus frontalis Zimm.

- ALABAMA Southern pine beetle activity continues to be centered in the eastern part of the state. Beetle activity during 1963 remained at a relatively low level. In previous years, epidemic populations occurred during the late summer and early fall months.
- GEORGIA Beetle activity continues at a reduced level on the Chattooga and Tallulah Districts of the Chattahoochee National Forest. An estimated 1600 southern pine beetle infested trees were found by aerial surveys during the latter part of July, 1963.
- The Georgia Forestry Commission reports that the southern pine beetle is now endemic in all counties included in the original control project. Nearly 814,000 trees have been removed and treated since March, 1962, by the Georgia Forestry Commission personnel. The total number of spots treated is approximately 18,400.
- Industry removed an additional large number of infested trees not included in the above report. (See June, 1963 issue for additional information.)
- MISSISSIPPI Southern pine beetle activity on the Homochitto National Forest increased slightly, but still remains at a relatively low level. An aerial evaluation survey in July resulted in a figure of 1.5 infested trees per 1000 acres compared to 0.4 for a similar survey in April.
- NORTH
CAROLINA An epidemic of the southern pine beetle, occurring over the Piedmont counties during 1962, declined considerably. This decline in activity is probably due to cooler than normal winter temperatures and organized control efforts by the North Carolina Division of Forestry.
- SOUTH
CAROLINA Epidemic beetle populations in the South Carolina Piedmont also declined. Cooperative aerial and ground surveys conducted by the South Carolina Commission of Forestry and the U. S. Forest Service during June and July, 1963, indicate an approximate 26,000 infested trees, as compared with 95,000 infested trees during June, 1962.

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SOUTHERN PINE BEETLE (Cont'd)

Programs to suppress southern pine beetle infestations on National Forest lands continue on the Tyger, Enoree and General Pickens Districts of the Sumter National Forest.

Beetle activity increased on the Francis Marion National Forest where 17,000 trees are currently infested by southern pine beetle. Although the center of the outbreak was on the Witherbee District and the Santee Experimental Forest, recent detection surveys indicate spread of activity to the adjacent Santee and Wambaw Districts. Most of the activity is on wet sites with 2 to 3 inches of water on the ground. Suppression programs are in progress over the entire forest.

TEXAS

Southern pine beetle populations increased in numbers and aggressiveness in a few localized portions of the epidemic area in southeast Texas, but overall activity continues at a lower level than at this time last year. The current "hot spot" is in Orange County, just north of the City of Orange. Several active infestations were reported for the first time from this area in June. (Texas Forest Service)

An aerial evaluation survey of southeast Texas by the Forest Insect and Disease Control Branch, U. S. Forest Service, in late June showed that the number of southern pine beetle infested trees per 1000 acres had increased from approximately 2 in January to approximately 8 in June.

Recent aerial evaluation surveys of the Texas National Forests indicate that beetle activity remains at a low level on the Big Thicket Ranger District. The number of infested trees per 1000 acres was found to be approximately 1 — the same figure as determined for the April survey. A survey in July indicated no southern pine beetle infested trees on the Angelina Ranger District. Trinity Ranger District personnel reported one spot of 4 infested trees.

BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Olivier)

ALABAMA GEORGIA

Black turpentine beetle populations in north and central Alabama and Georgia are generally at a low level; however, localized infestations have been reported.

BLACK TURPENTINE BEETLE (Cont'd)

ARKANSAS
LOUISIANA
MISSISSIPPI

Black turpentine beetle activity is on the increase in the southern part of Arkansas, in the Kisatchie National Forest, Louisiana, and in the Homochitto National Forest, Mississippi. Active salvage and control operations are being carried out in the National Forest and by the Arkansas State Forestry Commission.

NORTH
CAROLINA

Beetle activity was reported on pond pine stands following cutting in Onslow and Jones Counties. Scattered activity was also found in shortleaf and Virginia pine in Lincoln County and in loblolly pine in Lee County, with some spots containing up to 20 infested trees. An area, one quarter acre in size, was reported in Orange County where this insect was associated with Ips spp. (North Carolina Division of Forestry)

SOUTH
CAROLINA

The black turpentine beetle was frequently associated with southern pine beetle as a secondary invader on the Francis Marion National Forest. In addition, this insect is infesting cankered portions of trees infected with fusiform rust, Cronartium fusiforme Hedge. & Hunt, on trees injured by logging or lightning.

TEXAS

Damage to loblolly and shortleaf pine by the beetle continued in Houston, Cherokee, Montgomery, Nacogdoches, Rusk, Shelby, Trinity and Walker Counties. Salvage and control operations have been necessary in some areas. (Texas Forest Service)

TEXAS
NATIONAL
FOREST

Active projects are in force for control of black turpentine beetle on all districts of the Texas National Forests. Some districts have a small crew that spends most of its time locating and spraying trees both on recently logged sales and also along newly constructed roads and pipe and power lines. Spraying of seed trees left on areas to be regenerated and trees in seed producing areas is also done.

IPS ENGRAVER BEETLES

ARKANSAS

The heaviest concentration of ips activity is in the area bounded by Sheridan, Pine Bluff, Hanburg, El Dorado and.

IPS (Cont'd)

Malvern. Scattered and light infestations are in southwest Arkansas and in the Greenwood and Mena area. Most sites had from one to six trees, but in a few areas infestations affect areas up to one acre in extent. Seventy trees of log size were infested near El Dorado. (Arkansas Forest Pest Report)

ALABAMA
GEORGIA
LOUISIANA
MISSISSIPPI

Ips spp. activity increased in some areas in south Alabama and south Georgia because of drought conditions. Ample rainfall occurring during June and July, however, reduced ips attacks. Activity increased in Bienville, East Feliciana, East Baton Rouge and St. Helena Parishes, and the Catahoula Ranger District, Kisatchie National Forest, Louisiana. I. avulsus was the primary causal agent. Ips spp. activity also increased in the Homochitto and Bienville National Forests, Mississippi, and in scattered areas over the state.

NORTH
CAROLINA

Ips spp. activity was reported around the outer fringe of the southern pine beetle outbreak in Randolph, Stanly, Cabarrus, Anson, Montgomery, Lincoln, Rowan, Carteret, and Iredell Counties. (North Carolina Division of Forestry)

SOUTH
CAROLINA

The engraver beetles were also commonly found in trees that were struck by lightning on the Francis Marion National Forest and adjoining private lands in Berkely and Charleston Counties. On several occasions I. avulsus brood emerged from lightning strikes and attacked portions of the crown and individual branches of adjacent trees.

TEXAS

Heavy infestations of the beetle were reported from Anderson, Cherokee, Gregg, Liberty, Nacogdoches, Panola, Rusk, San Jacinto and Smith Counties. (Texas Forest Service)

TEXAS
NATIONAL
FOREST

Heavy loss of trees due to ips occurred in the Texas National Forests during the summer of 1962 because of long periods of hot, dry weather. Conditions in 1963 are similar to conditions last year, with numerous dead and dying trees from beetle attack.

PINE REPRODUCTION WEEVILS

NORTH
CAROLINA

Damage caused by the pales weevil, Hylobius pales (Hbst.), resulted in the destruction of two-thirds of the seedlings in

PINE REPRODUCTION WEEVILS (Cont'd)

an 8 acre loblolly pine plantation on the Croatan National Forest. This plantation, cut the previous fall, is in a drained pocosin site. Weevil broods probably developed in residual pine stumps and the emerging adults attacked the newly planted seedlings. Other areas on the Croatan National Forest planted during 1963, which did not have a similar site treatment, suffered "normal" or endemic losses due to reproduction weevils. (See June, 1963 issue for additional information.)

Larvae, pupae and adults of a weevil, Pissodes spp., infest 2 to 5 year old loblolly pine seedlings in drained swamplands on the Croatan National Forest and lands of the Riegel Paper Corporation near Bolton, North Carolina.

PINE SAWFLIES, Neodiprion spp.

NORTH CAROLINA

Pine sawflies were scattered and at a low level in North Carolina during 1963. Immature larvae of a loblolly pine sawfly, probably Neodiprion taedae taedae, are slightly more numerous than during 1962 in Craven County. The Virginia pine sawfly, N. pratti pratti, was reported from Granville, Vance, Rockingham and Guilford Counties. (North Carolina Division of Forestry)

TEXAS

Hardin and Polk Counties report defoliation by the black-headed sawfly, N. excitans.

BALSAM WOOLLY APHID, Chermes piceae (Ratz.)

NORTH CAROLINA

Aerial and ground detection surveys show that the balsam woolly aphid is now present in at least 5 separate areas, totaling over 1000 trees, on Roan Mountain. Detection surveys continue in other native spruce-fir stands in the Southern Appalachians to determine the present distribution of this insect.

Personnel of the North Carolina Division of Forestry detected 11 centers of balsam woolly aphid infestation on ornamental trees and in nurseries in Avery and Mitchell Counties.

ELM SPANWORM, Ennomos subsignarius (Hbn.)

GEORGIA
 TENNESSEE
 NORTH
 CAROLINA
 SOUTH
 CAROLINA

Elm spanworm activity declined abruptly and unexpectedly during 1963, with a total area of only 667,000 acres of infestation. Damage in over half of this area, some 432,000 acres, is negligible and classed as "very light". (Table 1). The major reason for this decline is believed to be the egg parasite, Telenomus alsophilae Vier., which emerged from spanworm egg masses in large numbers during June, 1963.

During 1963, the center of defoliation was in eastern Macon County, Swain County and the eastern half of Graham County, North Carolina, and a small area in the northern portion of Rabun County, Georgia. (Figure 1).

Table 1--Elm Spanworm Defoliation in the Southern Appalachians by States:

1963

1963					
Defoliation: Georgia : Tennessee : N. C. : S. C. : Total					
Thousands of Acres					
Very light	180	0	223	29	432
Light	11	0	197	0	208
Moderate	2	0	25	0	27
Total	193	0	445	29	667

FOREST TENT CATERPILLAR, Malacosoma disstria (Hbn.)

ALABAMA

In 1963, over 310 thousand acres of hardwood timber were surveyed in the Alabama, Tombigbee and Mobile River basin of Alabama. The amount of heavy and partial defoliation had increased from 5 to 7 percent and from 20 percent to 49 percent, respectively, over the 1962 percentages for these two classes of defoliation.

LOUISIANA

Results of the May, 1963 forest tent caterpillar aerial survey of more than 3 million acres of hardwood in south Louisiana show a substantial increase in the acreage defoliated by this insect.

FOREST TENT CATERPILLAR, Malacosoma disstria (Hbn.) (Cont'd)

	<u>1962</u>	<u>1963</u>
Acres heavy defoliation	168,600	793,520
Acres partial defoliation	<u>262,800</u>	<u>763,080</u>
Total acres defoliated	431,400	1,556,600

STATUS OF FOREST DISEASES

FOMES ANNOSUS ROOT ROT, Fomes annosus (Fr.) Cke.

REGION
WIDE

F. annosus continues to be one of the principal diseases in the Region with frequent reports of new infection centers. Recent infections have been reported on loblolly pine in Brunswick County, and shortleaf pine in Davidson and Union Counties, North Carolina by the North Carolina Division of Forestry. These reports are due to an increased awareness of the disease rather than an increase in incidence.

BROWN SPOT NEEDLE BLIGHT, Scirrhia acicola (Dearn.) Siggers

REGION
WIDE

Brown spot needle blight remains the most important disease of longleaf pine reproduction. Brown spot extends over the entire Region where longleaf pine reproduction is found.

OAK WILT Ceratocystis fagacearum (Bretz.) Hunt

ALABAMA

A detection survey for oak wilt in north Alabama was made during June, 1963. Specimens were taken from seven suspect trees and cultured in the laboratory. All specimens proved negative for oak wilt.

ARKANSAS
OKLAHOMA

Oak wilt is known to occur in north Arkansas and northeast Oklahoma. Incidence of oak wilt has remained relatively constant in these areas since its discovery in 1951.

OAK WILT Ceratocystis fagacearum (Bretz.) Hunt (Cont'd)

NORTH
CAROLINA

The North Carolina Division of Forestry reports the level of infections to be about the same as last year. One center, consisting of three trees in Haywood County, is of particular interest because climber's spikes wounded the trees in October, 1962.

TENNESSEE

The oak wilt fungus continues to kill scattered oaks in Greene and Washington Counties. The number of new infection centers discovered thus far in 1963 is approximately the same as the previous year. The number of re-active old centers is greater than in 1962.

MISCELLANEOUS INSECTS AND DISEASES

The fall webworm, Hyphantria cunea (Drury), is active again on the Pea Ridge National Military Park, Arkansas. Heavy infestations of the white pine bark aphid, Pineus strobi (Htg.), were in numerous locations in western North Carolina during 1963, including Asheville, Burnsville and Bakersville.

A decline of yellow poplar has been reported from a five-acre area on the Grandfather District, Pisgah National Forest, North Carolina. Symptoms include stagheading, dieback, thin foliage, stunted leaves and water sprouts.

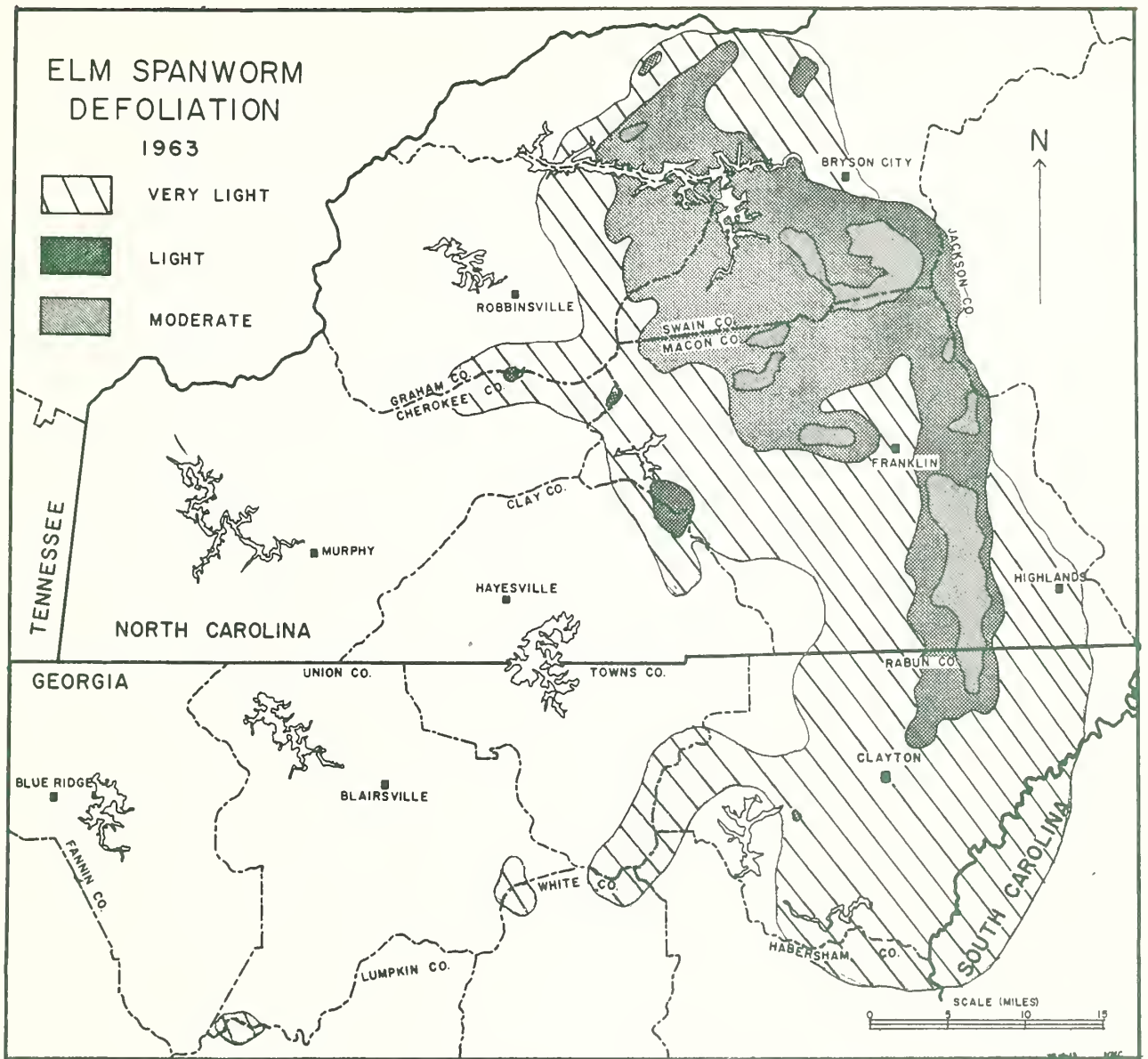


Figure 1



More detailed information can be obtained by writing to the Forest Insect and Disease Control Branch Zone Offices listed below or to the Atlanta office:

ZONES

FOR STATES OF:

Zone 1
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