

ANNUAL DISTRICT REPORT

YUKON DISTRICT

YUKON TERRITORY 1966

by

R. W. BARRY

FOREST RESEARCH LABORATORY

CALGARY, ALBERTA

FORESTRY BRANCH

DEPARTMENT OF FORESTRY AND RURAL DEVELOPMENT

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INTRODUCTION

The survey of the Yukon District in 1966 did not reveal any serious insect or disease outbreaks. Damage to aspen foliage was attributed mainly to a leaf roller and the poplar serpentine miner. Conifers were relatively free from attacks by insect.

Spruce needle rusts were evident throughout the District. Collections of spruce shoot rust were made in the west-central portion of the District. Needle casts of lodgepole pine and spruce were common throughout the District.

INSECT CONDITIONS

Cooley Spruce Gall, Adelges cooleyi (Gill.)

Damage to black and white spruce by the Cooley spruce gall aphid was relatively light in the Yukon in 1966. Very low populations were found 58 miles west of Dawson, 37 miles north of Whitehorse, 21 miles south of Carmacks and along the Alaska Highway from Watson Lake to the Yukon-Alaska Boundary. A high population on white spruce was reported 30 miles west of Haines Junction on the Alaska Highway.

Leaf Tier, Compsolechia niveopulvella Cham.

This leaf tier was common throughout the range of trembling aspen in the District in 1966. Low populations occurred along the Alaska Highway from Watson Lake to near Haines Junction, along the Mayo Highway from Whitehorse to Mayo, and 51 miles southeast of Ross River. Medium populations were observed along the Mayo Highway at Mile 76, 102, 118, and 139 and along the Alaska Highway at Mile 809. High populations were observed along the Alaska Highway at Mile 859, 885, and 990 and along the Dawson Highway at Mile 2.

Poplar Serpentine Miner, Phyllocnistis populiella Cham.

The poplar serpentine miner was common to all aspen stands examined in the District in 1966. Moderate damage to trembling aspen leaves occurred along the Alaska Highway at Mile 784 and Mile 1152 and 80 miles north of Watson Lake. Severe damage was reported along the Canol Road, in the vicinity of Watson Lake, and in the Beaver Creek region. In all other aspen stands in the District, light damage was evident.

Low populations in widely scattered areas also occurred on balsam poplar and black cottonwood.

DISEASE CONDITIONS

Spruce Needle Cast, Bifusella crepidiformis Darker

This needle cast was common on spruce throughout the Yukon in 1966. Light damage to white spruce was evident at Mile 34 Dawson Highway, Mile 139 Haines Highway, Mile 1206 Alaska Highway and along the Mayo Highway at Mile 80 and Mile 160. The disease was responsible for moderate to severe "casting" of white spruce needles at Mile 120 Mayo Highway, Mile 82 and Mile 91 Dawson Highway, and Mile 101 Canol Road. Moderate to severe damage was observed in black spruce stands 88 miles southeast of Ross River and at Mile 30 Dempster Highway.

Spruce Needle Rusts, Chrysomyxa spp.

Spruce needle rusts were present in most black and white spruce stands examined in the Yukon in 1966 but dry weather hampered spore germination which resulted in a generally low incidence of infection. Light damage was evident along the Alaska Highway from Watson Lake to the Yukon-Alaska Boundary, north from Watson Lake on the Cantung Road for a distance of 110 miles, east of Ross River along the new highway to the Cantung Road, along the Mayo Highway from Mile 120 to 230, and in spruce stands surrounding Dawson. Moderate damage in stands of mature spruce was observed in the region west of Mile 1105 Alaska Highway to near Beaver Creek. Severe damage was present on a few regeneration spruce in the same area.

Spruce Shoot Rust, Chrysomyxa woroninii Tranz.

In 1966 this rust was found on the primary hosts, black and white spruce, from Mile 0 to Mile 45 Dempster Highway, west of Dawson to Mile 49 Sixty Mile Highway, and at Mile 1206 Alaska Highway. A collection on the alternate host, Labrador tea, was made 49 miles west of Dawson.

Pine Needle Casts, Hypodermella concolor (Dearn.) Darker
Hypodermella montana Darker

These needle casts were common in most pine stands examined in the Yukon District during 1966. H. concolor was responsible for light to moderate damage of the 1965 needles at Mile 722 Alaska Highway and Mile 189 and Mile 230 Mayo Highway.

Light damage caused by H. montana was present at Mile 780 Alaska Highway, 97 miles southeast of Ross River, and 116 miles north of Watson Lake on the Cantung Road. Severe damage to needles on mature pine was evident at Mile 53 Canol Road.

TABLE I

SUMMARY OF INSECT AND DISEASE COLLECTIONS BY HOSTS

Host Coniferous	Collections		Host Deciduous	Collections	
	Insect	Disease		Insect	Disease
White spruce	18	68	Trembling aspen	52	17
Black spruce	3	12	Balsam poplar	10	22
Lodgepole pine	0	28	Black cottonwood	5	9
Alpine fir	0	4	Birch	1	2
Tamarack	1	2	Willow	3	32
	22	114		71	82
Insect collections from miscellaneous hosts					1
Disease collections from miscellaneous hosts					35
GRAND TOTAL					325

TABLE II

OTHER NOTEWORTHY INSECTS AND DISEASES
WHICH OCCURRED IN THE YUKON DISTRICT, 1966

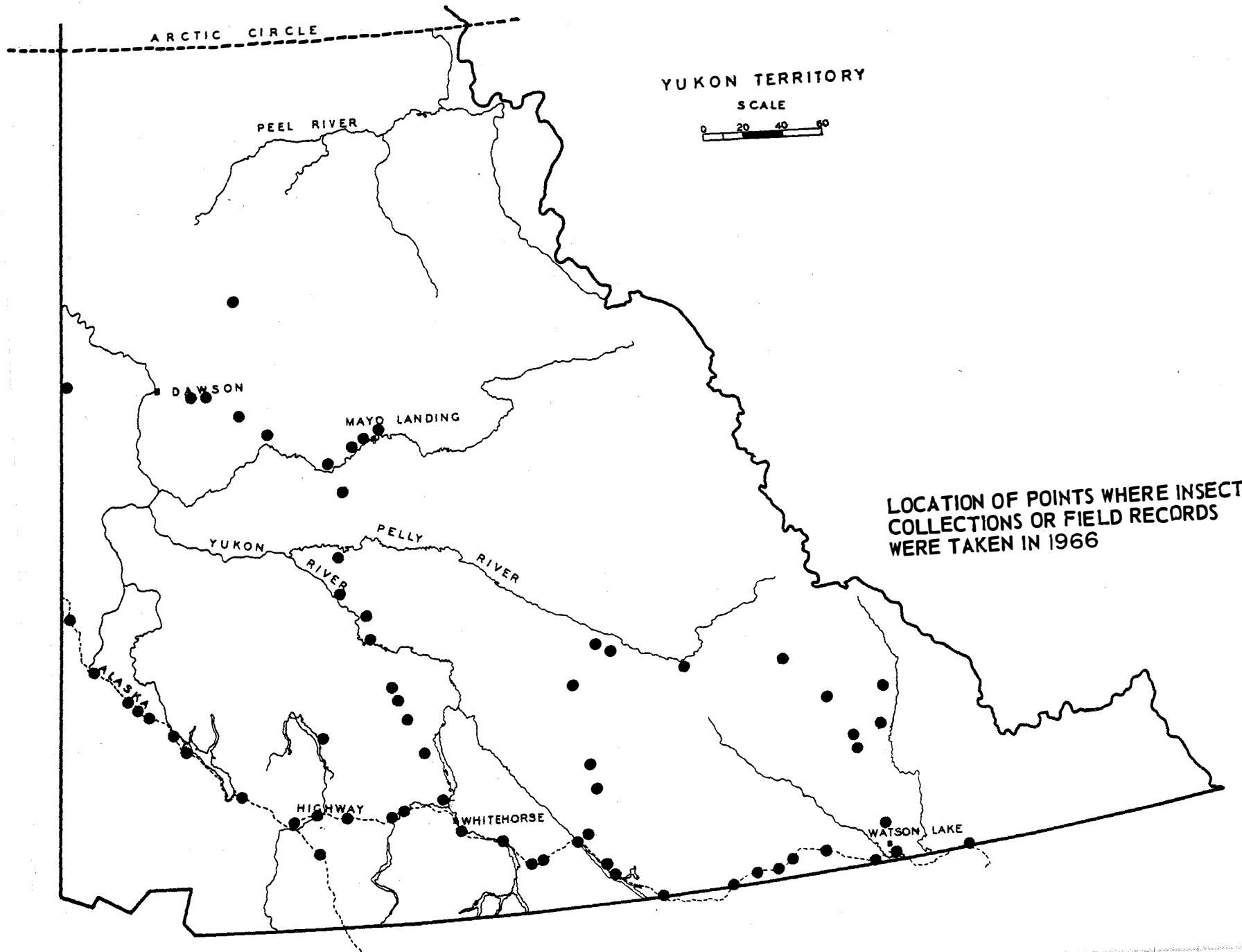
Causal Agent	Host	Remarks
<u>Insects:</u>		
Poplar bud-gall mite, <u>Aceria parapopuli</u> (Kiefer)	T. aspen	Collections made at Mile 809 and Mile 884 Alaska Highway.
Gall aphid on conifers, <u>Adelges lariciatus</u> (Patch)	W. spruce	Low population 69 miles north of Watson Lake.
Wolly larch aphid, <u>Adelges strobilobius</u> (Kalt.)	B. spruce	Collections made 88 and 127 miles southeast of Ross River.
Large aspen tortrix, <u>Choristoneura conflictana</u> (Wlk.)	T. aspen	Low populations observed at Mile 45 and Mile 118 on the Mayo Highway.

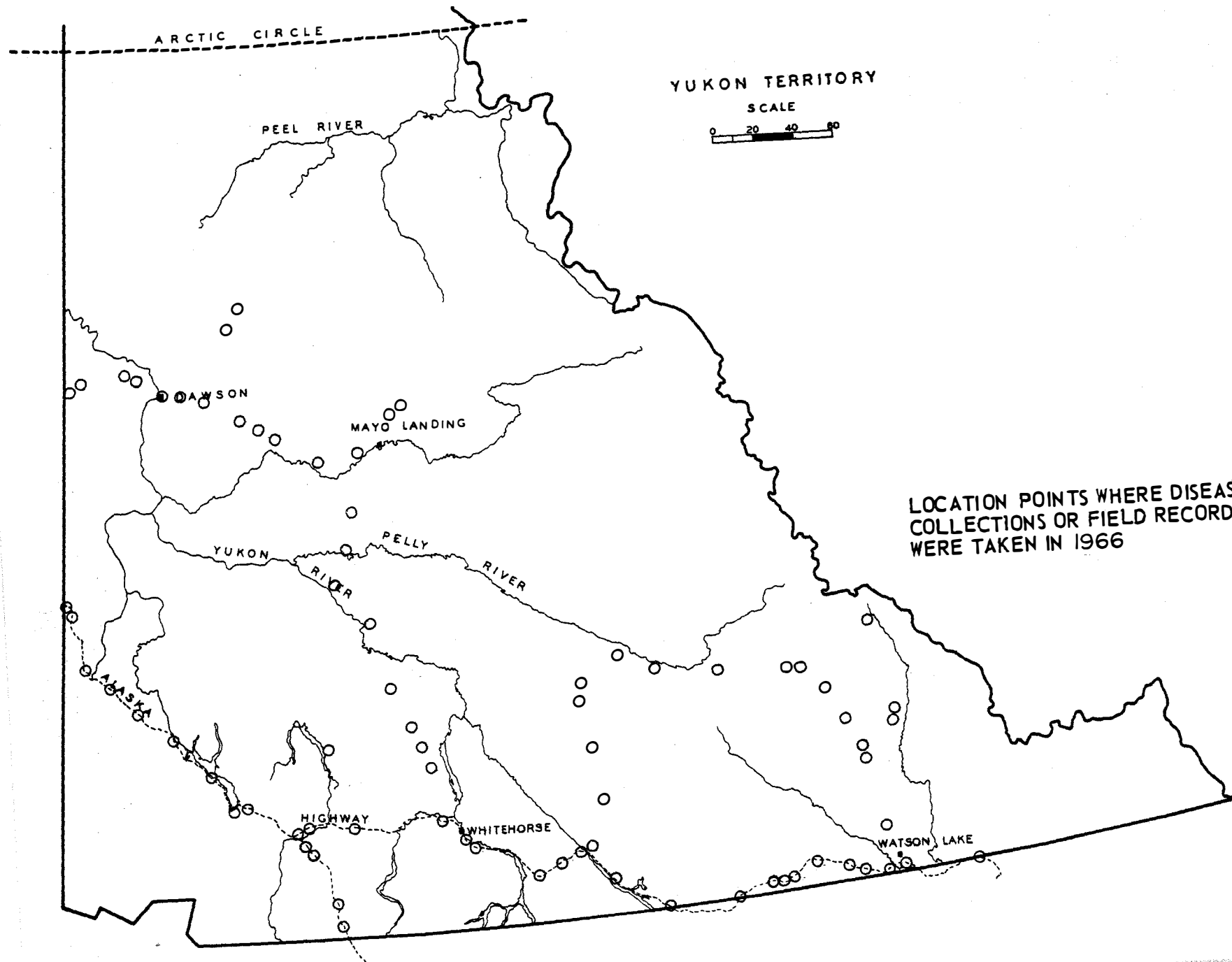
TABLE II - Other Noteworthy Insects and Diseases - Cont'd.

Causal Agent	Host	Remarks
Spruce gall aphid, <u>Pineus pinifoliae</u> (Fitch)	B. spruce W. spruce	Six collections taken at scattered points in Central Yukon.
<u>Diseases:</u>		
Yellow witch's broom of spruce, <u>Chrysomyxa arctostaphyli</u> Diet.	B. spruce W. spruce	Common throughout the Yukon.
Spruce needle rust, <u>Chrysomyxa empetri</u> Schroet. ex Cumm.	Crowberry	One collection made at Mile 53 Canol Road.
Spruce needle rust, <u>Chrysomyxa weirii</u> Jacks.	W. spruce	One collection made at Mile 674 Alaska Highway.
Comandra blister rust, <u>Cronartium comandrae</u> Pk.	Lp. pine	Collections taken at Mile 735 and Mile 905 Alaska Highway.
Hyperparasite of needle rust, <u>Darlucella filum</u> (Biv.) Cast.	W. spruce	Mile 1145 Alaska Highway and Mile 30 Dempster Highway.
Pine needle cast, <u>Elytroderma deformans</u> (Weir) Darker	Lp. pine	One collection taken 5 miles southeast of Watson Lake.
Spruce needle cast, <u>Lophodermium filiforme</u> Darker	W. spruce	Infection causing severe damage 49 miles south-east of Ross River.
Spruce needle cast, <u>Lophodermium macrosporum</u> (Hartig) Rehm	B. spruce	One collection taken 127 miles southeast of Ross River.
Pine needle cast, <u>Lophodermium pinastri</u> (Schrader ex Fr.) Chev.	Lp. pine	Found throughout the range of pine in the Yukon.
Willow leaf rust, <u>Melampsora epitea</u> Thüm	Willow	Common throughout the District.

TABLE II - Other Noteworthy Insects and Diseases - Cont'd.

Causal Agent	Host	Remarks
Western gall rust, <u>Peridermium harknessii</u> J. P. Moore	Lp. pine	Collected 146 miles south- east of Ross River and at Mile 657 and Mile 838 Alaska Highway.
Fir needle rust, <u>Pucciniastrum goeppertianum</u> (Kuehn) Kleb.	A. fir	Light damage at Mile 92 Canol Road and Mile 715 Alaska Highway.
Tar spot, <u>Rhytisma salicinum</u> (Pers.) Fr.	Willow	Common throughout the Yukon.
Shoot blight of balsam poplar, <u>Venturia populina</u> (Vuill.) Fabric	B. poplar	Six collections taken at scattered points in the District.
Aspen shoot blight, <u>Venturia tremulae</u> Aderh.	T. aspen	Collected at Mile 824 and Mile 1206 Alaska Highway, Mile 120 Mayo Highway and Mile 15 and Mile 58 Dawson Highway.





LOCATION POINTS WHERE DISEASE
COLLECTIONS OR FIELD RECORDS
WERE TAKEN IN 1966