

WHEN IN DOUBT—CALL:

**Arizona State
Forestry Division**

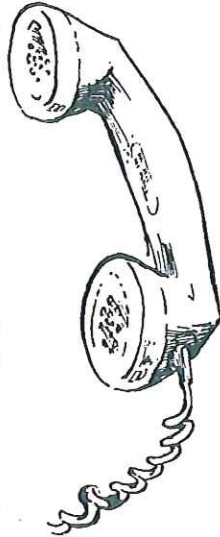


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The washing and removal-of-eggs method is a **SIMPLE, INEXPENSIVE, and EFFEC-TIVE** control procedure.

It offers an alternative to the use of chemical pesticides.

Harold W. Flake, Jr., Entomologist, S&PF,
Forest Insect & Disease Management,
Albuquerque, New Mexico 87102.

Daniel T. Jennings, Research Entomolo-
gist, Rocky Mtn. Forest & Range Exper-
iment Station, Albuquerque, New Mex-
ico 87101.

ED. NOTE: Technical material in this leaflet is found in: "A Cultural Control Method for Pinyon Needle Scale," by Harold W. Flake, Jr., and Daniel T. Jennings, USDA, Forest Service, Rky. Mt. For. and Range Exp. Sta. Res. Note RM-270, 4 p.

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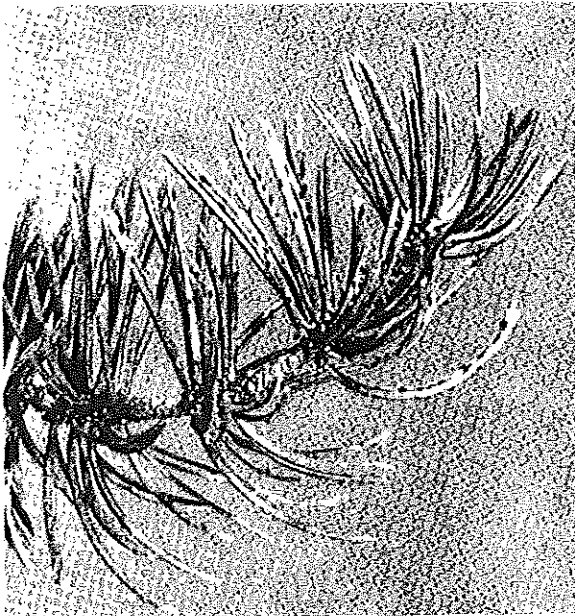
HOW TO CONTROL



Pinyon Needle Scale Insects

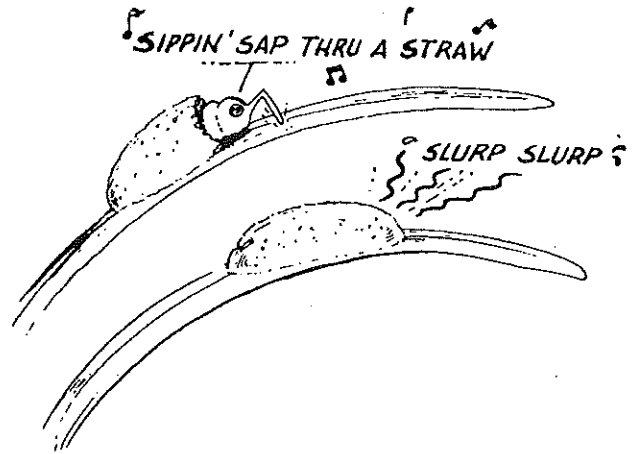
Pinyon needle scale is a serious pest of pinyon in the Southwest.

SYMPTOMS OF INFESTATION



- yellowing or browning of foliage
- short, stubby needles
- premature needle drop
- black “peppered” dots (scales) on needles

Scale insects damage trees by inserting their tube-like mouthparts into the needles and sucking the juices (sap) out.



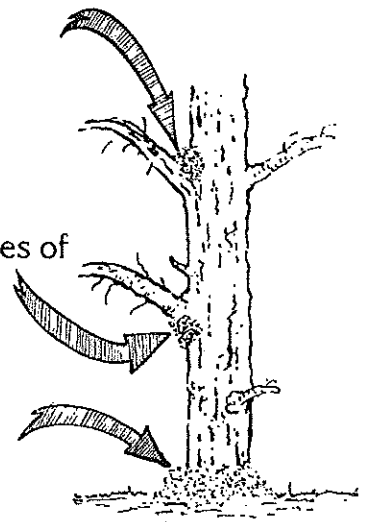
IMPORTANT HABITS

In early March, female scale insects lay eggs in bark cracks and under bark flakes—

1. In crotches of large branches.

2. Along undersides of large branches.

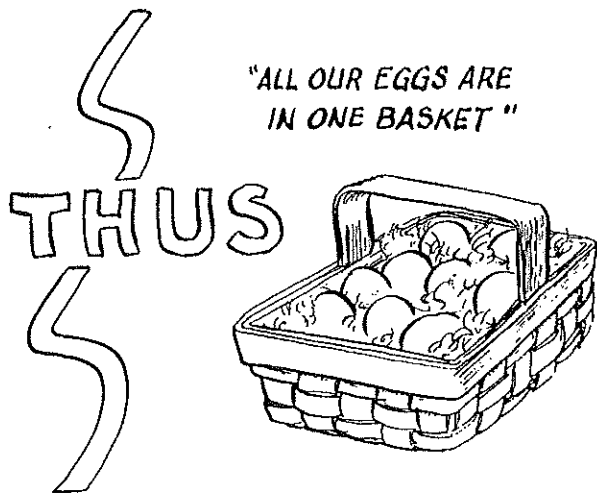
3. Around bases of trees





NOTE: Egg masses look like white "cottony" webbing.

Only during the egg stage are scale insects highly concentrated.



The egg stage offers a good opportunity for control.

CONTROL... 3 EASY STEPS

STEP 1.

Wash eggs off branches and trunk with a strong stream of water.



Remember!

Thoroughly wash:

- tree trunk
- branch crotches
- undersides of branches

STEP 2.

Rake eggs, litter, and debris from around tree base and . . .



. . . out to drip line of tree crown.

NOTE: Wet eggs and litter may be allowed to dry 1-2 days before raking.

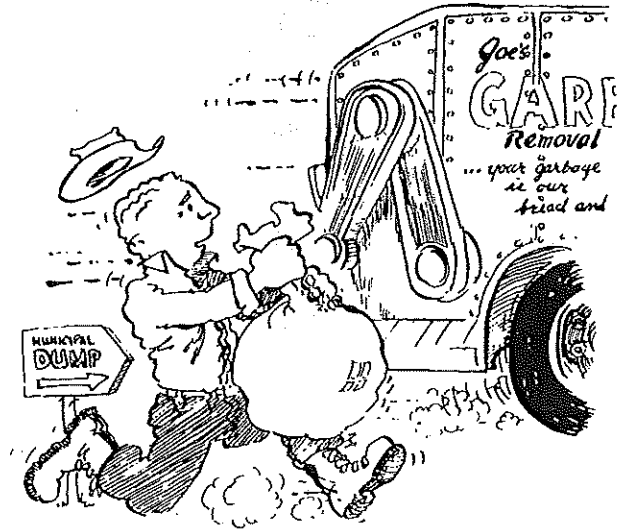
BUT

They must be removed before the eggs hatch



STEP 3.

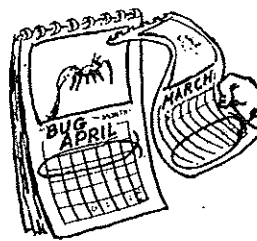
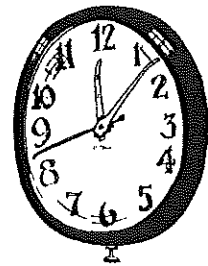
Bag eggs and litter and destroy.



IMPORTANT!

Proper timing of the washing treatment is critical.

Washing will be effective only during the egg stage.



In the Southwest, eggs can be washed from trees from about mid-March until mid-April.

If you wash too early — not all eggs will have been laid.

If you wash too late — eggs will have hatched and the young scale insects (crawlers) will have moved to the needles.