

SALAMANDER SHINGLE SET-UP INSTRUCTIONS

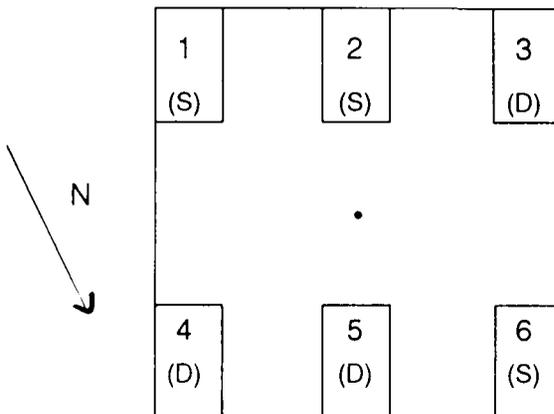
Introduction

Cedar shingles on the forest floor act as refugia for salamanders. We have set out shingles along two transect lines in stations of six in order to collect information about salamander populations. The arrangement of the shingles at the station and the station locations provide coverage in a range of habitat types. Set-up of the shingles is described here. See "Salamander Shingle Station Instructions" for censusing procedures.

Procedure

1. Cut cedar shingles into 10x25cm size. Prepare enough for six at every station.
2. There are thirty stations along the north S-1 line and thirty along the south S-1. Each station is south of the S-1. Prepare sixty tall yellow flags to mark the station's location by marking each with an "N" or "S" followed by the distance in meters from the west end of the line, e.g., N120 or S505.
3. Upon reaching a station, put the appropriate yellow flag in the actual center point of the station. Stations are generally 2–3m south of the S-1 where the ground is most level.
4. Measure a 1m square around the flag and place the shingles in the corners and midpoints as shown below in Figure 4–12. The shingles are numbered according to their position at the station; though they are not actually labelled by these numbers, they are referred to using this arrangement.

Figure 4–12. Salamander shingle layout and placement.



5. Within each pair of shingles (1–4; 2–5; 3–6), place one on the surface of the litter and one in a 5cm deep hole in the litter. Determine the placement by flipping a coin: heads=shallow (S) and tails=deep (D) as shown in Figure 4–12. Only one coin toss is required for each pair. Mark on a blank data sheet the placement of each shingle with an S (shallow) and D (deep).
6. Shingles will need to be maintained over time. During a census, note any shingles that have disintegrated. In a visit separate from a census, replace those shingles and check that all shingles designated D (deep) are lying squarely at 5cm depth.

Equipment

Tall yellow flags	Black marker
360 10x25cm cedar shingles	Data sheet from “Salamander Shingle Station Instructions”
Clipboard	Ruler
Pencil	Coin
Meter tape	
Trowel	

Date: 01 DEC 92

File name: SS-SETUP.INS