SURVEY & MANAGE SALAMANDER SURVEYS
SUGGESTED STEPS FOR LAYING OUT TRANSECTS

Don't spare the flagging! Use colors that won't blend in with either spring or fall leaf colors.

1. Make sure that the project boundaries have been clearly marked.

2. Decide on the size of the adjacent area.

3. Flag the baseline, usually an upslope line. Mark the start of each transect (usually every 25 m), writing the transect number and "Start" on the start point. It's also a good idea to fully flag the end line.

4. Decide on the compass bearing to use for the transects. Record that on Form #1, comments.

5. From each transect start point, follow the compass bearing, flagging <u>frequently</u>, and writing the transect number and distance from start on the flagging at least every 15 m. Write the transect number, total transect length, and "End" on the end point. Record the total length of each transect on Form #1. (Alternating flagging colors for adjacent transects is a great idea.)

6. While flagging each transect, look for good habitat patches that are between 5 and 15 m (for 25 m transect interval) above or below the flag line. Mark the nearest point on the transect.

7. Flag each habitat patch, writing its number on the flagging. Record the patch number and directions to it (distance along the transect, distance and compass bearing from the transect) on Form #1.

8. Complete Form #1 and a project map. Make copies for field use.

9. Fill out site information (project name, state, county, UTM, quad., and legal description) on Forms #2, 3, and 4. Make copies for field use from <u>these</u> originals, preferably on waterproof paper. This will save a lot of writing.

SUGGESTED STEPS FOR SURVEYING

1. Make sure that every surveyor has:
   Copies of Form #1 (filled out) and project map
   Copies of Forms #2, 3, and 4 with site information filled out
   All necessary equipment, (including salamander attractant!)

2. At the site, fill out the rest of the headers of Forms #2 and #3 (except end time). Assign each transect to a surveyor, and make certain each surveyor knows which transects to survey.

3. Walk to the baseline and the start point for your first transect.

4. Check temperature and moisture at 3 spots. Record these on Form #2, Cluster A. Read over Form #1 to determine midpoint and any patches along this transect.

5. Record begin time on Form #4 and begin survey along the transect.

6. Use Form #3 to record any amphibians found. Use Form #4 to record break time (if more than a minute) from the survey for identification, measurement, and recording data. If you find a target salamander, bring it back alive for verification, and conspicuously flag the capture point, writing all required data on flagging or tag. If you later find others, bring back one adult, and release others at the exact spot where each was found.

7. When you reach the point adjacent to a habitat patch, use Form #4 to record length of break from surveying the transect. Check temp./moisture at the patch and record them on Form #2 (just Cluster A). Record begin and end time surveying the patch (5 min. maximum) on Form #4. Record any amphibians on Form #3.

8. When you reach the midpoint of the transect, use Form #4 to record length of break from surveying the transect. Check temp./ moisture and record them on Form #2, Cluster B.

9. If it is necessary to take any other breaks while surveying a transect, record length of breaks on Form #4.

10. At end point of each transect, record end time on Form #4. Check temp./moisture and record them on Form #2, Cluster C.

11. Walk along the end line to the end point of your next assigned transect. Repeat 4 to 10 above, but surveying from the end point back to the start of the transect. Repeat for each assigned transect, alternating beginning at the start and end points.

12. At the end of the last transect (or the end of the day), record the end time and location on Form #4.

13. When the survey is finished, complete all forms (e.g., calculating total times, filling in page numbers for the whole set of forms for the site).