APPENDIX E. FOREST MONITORING STEP-BY-STEP FIELD CHECKLIST

1. Locate site of forest plot.

2. Lay out a 20 × 20 meter plot and mark the corner posts with PVC pipe or rebar. If two people are present, one person can stand at a corner with a compass and guide the other person running out the tape.
   (a) Secure the end of a 50-meter tape (tape #1) at one corner (e.g., NW) with a chaining pin. Walk south 20 meters, unwinding the tape behind you.
   (b) Secure tape #1 at 20 meters (SW corner) with a chaining pin, turn 90 degrees, and walk east 20 meters, unwinding tape #1 behind you until it extends 40 meters (SE corner).
   (c) Secure the end of a second 50-meter tape (tape #2) at the SE corner with a stake or chaining pin. Turn 90 degrees and walk north 20 meters, unwinding the tape behind you.
   (d) Secure tape #2 at 20 meters (NE corner) with a chaining pin, turn 90 degrees, and walk west 20 meters, unwinding tape #2 until you reach the starting point (NW corner).
   (e) Tape #2 should be at or close to 40 meters (i.e., between 39.7 and 40.3 meters) when you return to the starting corner.

3. Identify a spot on your body that is 1.4 meters above the ground (a pole that is marked or cut to that length may be helpful).

4. Measure (with DBH tape) the diameter at 1.4 meters above the base of all standing trees or shrubs (at least 2.5 centimeters in diameter) that are growing inside the 20 × 20 meter plot.
   • If the tree is on a slope, measure the diameter at 1.4 meters from the uphill base of the tree.
   • If the tree has a deformity 1.4 meters above the base, measure the diameter just above or below the deformity and note where the measurement was made for future measurements.
   • If the tree has at least two trunks emerging from the base, measure the trunks as separate trees if the trunks split below 1.4 meters; measure as one diameter if they split above 1.4 meters.

5. Record the species, diameter, and condition (alive or dead) of each tree.

6. To avoid double-counting or missing trees, you may wish to divide the plot into four 10 × 10 meter squares with two additional tape measures and/or use chalk to mark the trees as you move about the plot.

7. If you wish to track individual trees in the plot, nail an aluminum tree tag into each tree greater than 8 centimeters in diameter and record the tag number next to the diameter and species information on the data sheet. The nail should be inserted about 1 meter high on the trunk, at an upward angle, and only slightly into the wood to allow the tag to hang away from the tree. For smaller trees, 2.5–8.0 centimeters in diameter, tree tags should be strung loosely to the trunk with wire to avoid cracking the trunk with the nail.