

Protocol

The NRRI bird monitoring program has over 1300 permanently marked sampling locations in the Chequamegon, Chippewa, and Superior national forests. Points are at least 200 m apart, usually in a group of 12 per forest compartment visited by one walking bird observer in one morning (Figure 1). Point locations are marked with orange (usually) spray-painted identification numbers on a tree and also with pink flagging. In treeless habitats, the point center may be marked with flagging only. Points can be accessed using GPS navigation. The walking route between points is also marked with pink flagging. There are three points located in a forest stand, for a total of 4 stands per route; our goal here is to sample one randomly-chosen point per stand. Thus, for a typical forest compartment consisting of 12 points, the survey crew will sample four points total while passing by eight point locations.

Vegetation will be most efficiently sampled in teams of 2 people. The crew should navigate to the first randomly selected point in a compartment using the compartment maps, flagging, paint, and GPS units. The point will serve as a reference location for several vegetation measurements that should take between 30-45 minutes per point.

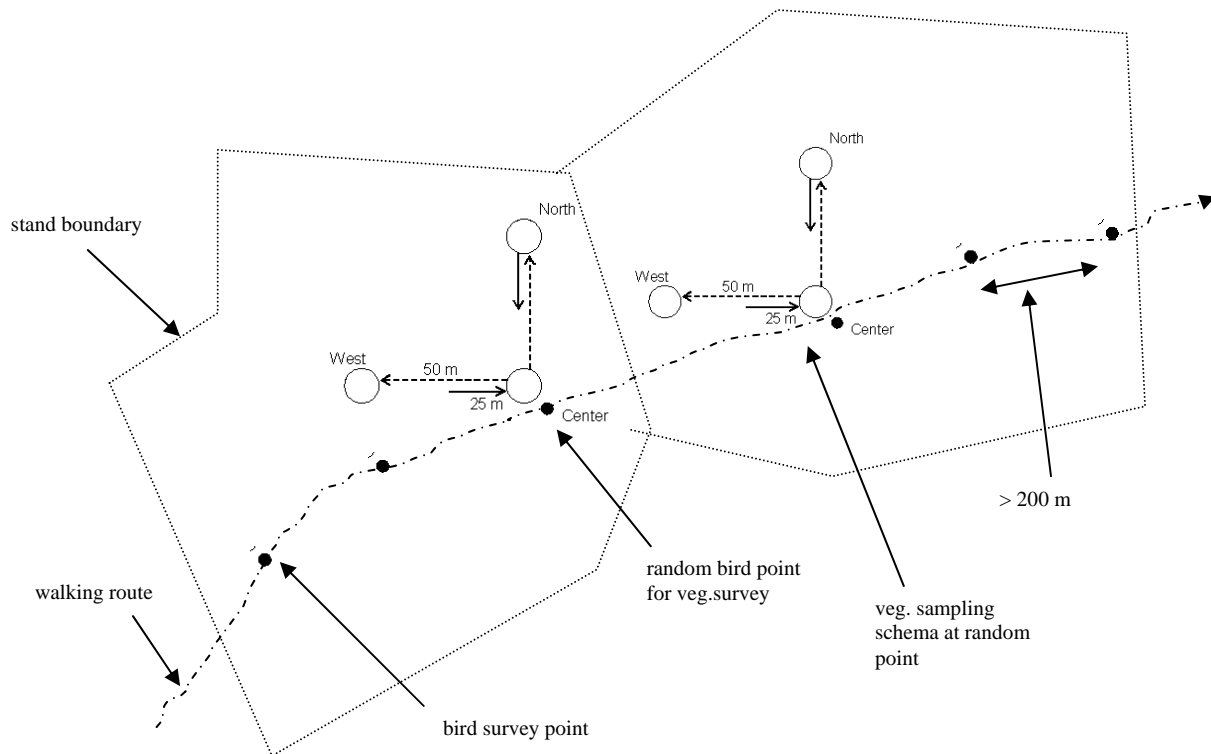


Figure 1. Example layout of bird survey point locations and randomly chosen points.

