

APPENDIX A: Measuring your pace

The easiest way to measure distance in a forest is to count paces. One pace is defined as two steps or the distance one foot travels from the point it leaves the ground until it touches the ground again.

Measure your pace before going out in the field. To do this, mark a distance of 50 feet on the ground. Walk this distance in your *normal gait*, starting with your right foot and keeping count of the number of times your left foot touches the ground. Count the number of paces it takes to travel 50 feet and divide 50 by the number of paces to determine the length of your pace in feet. If you need to convert this to meters, please see “Conversion factors” below for a conversion chart.

For example, if it takes 14 paces to walk 50 feet, your pace is roughly 3.5 feet long (50 feet/14 paces = 3.5 feet/pace). When pacing large distances, you can simply measure in increments of 50 feet by using your count (for example, every 14 paces, count 50 feet).

APPENDIX B: Determining forest patch size

Determining the sizes of the forest patches in which your study sites are located is critical to BFL. Here's how to do it. First, identify and outline the forest patch on your aerial photo or map. You can use tracing paper or clear acetate if you don't want to write directly on the map or photo. If the edge of your forest patch is not distinct, consider areas with less than 15 percent tree canopy cover as nonforest. For this study, a change in tree species is not considered an edge. However, any gap in the forest patch more than 300 feet (90 meters) wide is considered an edge. If your forest patch is connected to other forested areas by a forested corridor, then for the purpose of this project your patch is part of the larger, interconnected forest; measure the **total** area.

Once your patch is outlined, you can measure patch size in several ways:

- **Grids**—If you are using maps or aerial photographs with a 1:24,000 scale (such as 7.5-min. USGS topographic maps), you can use the transparent grid overlay provided in this binder. Lay the grid over the outline of the patch. Count the number of squares in the grid that are at least half filled by the forest patch, then multiply this number by a conversion factor of 2.5 to estimate the area in acres or 1.0 to estimate the area in hectares. (Each square in the grid provided in this binder represents 2.5 acres or 1 hectare.) If you are using a different scale, refer to Table 2 on page 2.13 of the *Study Site Instructions* section.
- **Pacing**—If the patch is small, you can pace its dimensions on the ground, then calculate the area from your estimates of distance. Refer to Appendix A for information on measuring your pace.
- **Assistance of land managers**—If you have teamed with professional land managers, you may be able to enlist their assistance in measuring patch size. They may have planimeters or computer mapping systems that allow easy and accurate measurements.

NOTE: If your study site is in a forest patch larger than 500 acres (200 hectares), you may estimate the size to the nearest 100 acres (40 hectares). If the patch is larger than 5,000 acres (2,000 hectares), estimate to the nearest 1,000 acres (400 hectares).

APPENDIX C: Field checklist

Essential

- Topographic maps/aerial photos**
(or other map with directions)
- Compass**
- Watch** (or timer)
- Flagging tape**
(to mark your survey point and trails)
- Binoculars**
- CD player**
- BFL CD**
- Clipboard**
- Pencils**
- Field data forms**
(photocopy as many as needed)

Optional

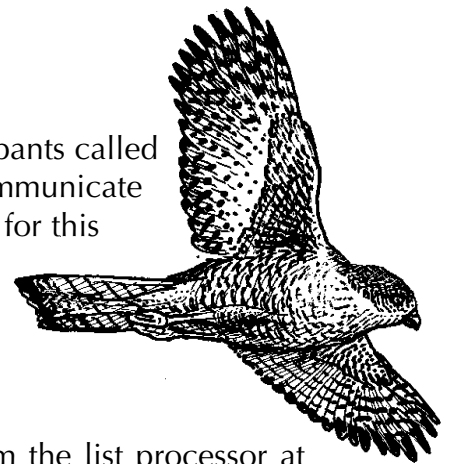
- Field guide to birds**
- Field guide to trees**
- Insect repellent**
- Food and water**
- Camera**
- Field notebook**
- Spare batteries** for CD player

APPENDIX D: BFL e-mail list

We have created an e-mail discussion group for BFL participants called BFL-L. This is an exciting opportunity for participants to communicate with each other, ask questions, and compare results. To sign up for this list, just send an e-mail message to <listproc@cornell.edu> with the message:

SUBSCRIBE BFL-L Firstname Lastname

You will receive a verification that you have subscribed from the list processor at Cornell, and then you're ready to send and receive mail. You can write to the list by sending your message to: <BFL-L@cornell.edu>. Remember, everyone who has subscribed to this list will receive your message. The list is "owned" and managed by the BFL staff and will be maintained on the server at Cornell University. *We hope that everyone who is a part of BFL and has access to email will join this discussion group.*



APPENDIX E: Conversion factors

English to metric

Feet to meters—divide by 3.28
(or multiply by 0.3048)

Acres to hectares—divide by 2.47
(or multiply by 0.4047)

Miles to kilometers—multiply by 1.61

Metric to English

Meters to feet—multiply by 3.28

Hectares to acres—multiply by 2.47

Kilometers to miles—divide by 1.61
(or multiply by 0.6211)