

2008 Foray Instructions

Thank you for participating in the 2008 VSO Foray. This year's Foray theme is breeding bird surveys along riparian corridors, and marks the first time that the Virginia Department of Game and Inland Fisheries has collaborated with the Virginia Society of Ornithology on the design of a Foray.

The 2008 Foray has as its primary objective the collection of data on the distribution and abundance of avian species associated with forested riparian areas. The Foray is designed to begin filling a gap in Virginia breeding bird survey data associated with this habitat type, which is under-surveyed by the road-based North American Breeding Bird Survey (BBS). The surveys are targeted at particular segments of various Coastal Plain and Piedmont rivers. They will take place by canoe and kayak in order to maximize access to otherwise inaccessible areas. As such, this year's Foray is unique in being one of only a handful of landbird surveys in the country that have been conducted by paddling along waterways.

Please read these instructions thoroughly and make sure that you are comfortable with what they entail. It is anticipated that the surveys will involve moderately strenuous exercise in portaging and paddling canoes/kayaks. Your scheduling of the surveys will depend on a variety of factors associated with weather and river conditions. Finally, the surveys will make for relatively long days out on the water.

It is important that the instructions be followed carefully when conducting the surveys, in order to ensure that data are collected in a standardized format so that they can be compared among all the routes.

Volunteer Requirements

Surveyors should be capable of identifying Virginia breeding bird species by sight and sound, and should have good eyesight and hearing. Paddlers should be experienced and have access to a canoe or kayak.

Timing of Surveys

All surveys should take place between May 31 and June 30, although certain river segments may be more navigable earlier in June as they will have higher water levels. A route along a segment should be surveyed once during this period. All surveys should be conducted starting at official sunrise (plan on being at the first survey point at that time; see http://aa.usno.navy.mil/data/docs/RS_OneDay.php for sunrise schedules), and should be completed by 10:00 a.m. Survey routes consist of up to 20 survey points. Surveyors should strive to have all of those points completed by 10:00 a.m. However, any points that have not been surveyed by that time should still be surveyed.

Survey Logistics/Safety Considerations

Survey routes follow river segments that were chosen based on a combination of factors, including: access points for boat launching (put-ins and take-outs), navigability, and presence of forested habitat. For safety and logistical reasons, it is **highly recommended** that two people conduct the surveys together (although only one person should be identifying and counting birds). One of these persons should be an experienced paddler with knowledge of the particular river segment or with enough experience to feel comfortable navigating a new stretch of river. Only experienced paddlers should attempt to conduct surveys on their own. If you are not an experienced paddler and do not know any experienced paddlers, we will try to match you up with someone who does have experience in order to conduct the survey.

It is also **highly recommended** that surveyors float their route once prior to the day of the survey. This will allow observers to 1) confirm accessibility to the route in terms of the put-ins and take-outs, as well as parking accessibility; 2) confirm navigability of the route and to be aware of potential obstacles that may affect navigability (ex. downed trees); 3) familiarize themselves with the location of the survey points prior to the survey; 4) give observers a sense of how quickly they will need to paddle between points in order to complete the survey by 10 a.m. Although survey routes were selected by consulting with persons who have navigated these river segments, conditions along routes are variable. Floating the route ahead of the survey date should help observers to familiarize themselves with the route and any issues they may face during the survey, as well as to minimize the amount of time spent searching for survey points on the day of the survey, when time is of the essence. If you feel that a route or portion of a route can not be surveyed due to accessibility or navigability issues, please contact the Foray coordinator.

For each route, up to 20 pre-established survey points are marked along river banks on maps provided to observers. These points are separated by a distance of approximately 300 meters (984 ft) as the crow flies. Points should be surveyed in chronological order. Each point should be surveyed **from the boat** as close as possible to the river bank. While at a point, the boat should be anchored or stationary in order to prevent drifting while surveying. If conditions make it difficult or unsafe to conduct a survey at a particular point (ex. downed tree in water), or if constant, excessive noise significantly affects your ability to hear birds at a point (see 'Survey Protocol' section), you may move the point up to 20 meters (66 ft) upstream or downstream, but must mark the new location on the map that was provided and return a copy of that map when submitting the data sheets.

Note that, along many of the routes, the take-out location is further downstream than the last survey point, and may add up to several hours to the entire survey day. Please plan accordingly.

Your safety should be the number one consideration in conducting these surveys. In scheduling your survey, please take river and weather conditions into account.

- Be aware of wind speed and direction. Do not survey on days with winds above 12 mph.
- Be aware of flow conditions when scheduling surveys:
 - See <http://waterdata.usgs.gov/va/nwis/current/?type=flow> - refer to the discharge graph for a particular river, scheduling surveys along or below the median daily value. Do not survey following heavy rains.
 - See <http://www.weather.gov/ahps/> for river forecasts.
 - If surveying routes along tidal portions of rivers, be aware of the timing of the tides (see <http://www.saltwatertides.com/dynamic.dir/virginibsites.html>).
- Write a float plan indicating where you intend to put in, take out and when you expect to return. Give it to someone who will call for assistance if you don't return on time.
- Dress appropriately for the surveys. Wear a lifejacket. Wear a hat and appropriate clothing to protect you from sun and weather exposure. Use sun block and insect repellent as needed.
- Keep in mind that you will be out on the water for many hours. Bring food and water.

- Please refer to the following website for more safety information:
<http://www.americancanoe.org/safety/safety.lasso>

Survey Protocol

Surveys should not be conducted during unfavorable weather conditions, including fog and/or rain above a drizzle and wind blowing at greater than 12 mph (which can create excessive noise as it blows through leaves and affect your ability to hear birds). Weather forecasts can be obtained at www.intellicast.com. See the 'Survey Logistics/Safety Considerations' section for information on planning your survey around weather and river conditions.

Use one data sheet per survey point. At each point, fill out the following on your data sheet: name of the observer (person identifying and counting birds), name of the river, route number, point number, survey date, time at which the survey begins, and codes for wind and sky conditions (see data sheet for explanation of codes). At the end of the count period at a point, indicate on the data sheet whether constant excessive noise significantly interfered with your ability to hear birds at that point. Do not mark the 'excessive noise' box if the disturbance was temporary (lasted <45 sec). Sources of excessive noise may include rushing river water, lawn mowers, barking dogs, airplanes, vehicles, etc.

One and only one observer should identify and count birds. Conduct your survey at each point for a total period of **6 minutes, divided into 3 equal time periods of 2 minutes each** (use a watch equipped with a second hand or chronometer function to time these). Record all birds that you detect by sight or sound during this 6 minute period. For each bird detected record that individual on the data sheet in the **time period** and **location** in which you **first** detect it (each individual should be recorded only once). The location in which you detect an individual bird will be either river right (right side of the river when facing downstream) or river left (left side of the river when facing downstream). On the data sheet, use one row per species in recording individuals, identifying the species by its common name or by its 4-letter alpha code (<http://www.pwrc.usgs.gov/bbl/manual/bandsize.htm>). The number of individuals of a species recorded per time period and location can be represented numerically or with hatch marks. Record juvenile or newly fledged birds on a separate row and label them as such. Record birds detected in flight in the flyover column. Please refer to the sample data sheet below as an example of how to correctly fill out the data sheet.

Birds will sometimes move during the counting period. Use your best judgment in determining new detections from those of birds that have moved during the count.

Absolutely no method of coaxing birds should be used under any circumstances during the counting periods. This means no "spishing" or tape playbacks or any other method.

Birds seen between points or before and after the 6 minute counting period should not be counted, but may be noted in the margin. Such birds are of some interest, but do not spend extra time pursuing them, as it is important to finish the entire survey within the time limit because bird activity may change drastically after then.

Submitting Data

Mail all original data sheets to: Sergio Harding, Virginia Department of Game and Inland Fisheries, 4010 West Broad Street, Richmond, VA 23230. It is recommended that you make photocopies of the data sheets and retain these for your own records. These copies will serve as backup should the data you submit be lost in the mail. Return route maps or copies of route maps only if you have made changes to the location of one or more survey points and have marked these on the maps.

2008 Foray Sample Data Sheet

The following is provided as an example of how birds detected at a point during the survey would be recorded on the survey data sheet. The observer begins his survey at the point while anchored at the left bank of the river while facing downstream (river left).

Within the first two minutes of the survey period, he hears:

- two red-eyed vireos singing from the left side of the river and one from the right side (river right)
- one prothonotary warbler singing from the left side of the river

Within the next two minutes of the survey period, he hears:

- one Carolina wren on the left side of the river
- one NEW prothonotary warbler singing on the left side of the river
- the observer continues to hear the birds that he detected in the first two minutes, but does not mark these on the data sheet again, as he is recording each individual bird only once, in the time period in which it was first detected
- he also sees two tree swallows foraging over the river, and marks them in the 'flyover' column

Within the last two minutes of the survey period, he hears:

- one pileated woodpecker on the right side of the river
- he also sees one great blue heron flying past, and marks this individual in the 'flyover' column

