Protocol for COMMUNITY SCIENCE eBIRD MONITORING AT COOK PARK

Background:
Portland Audubon and Clean Water Services are partnering on a community science survey project at Cook Park in Tigard. This site is continuously bordered on the west side by the Tualatin River, and contains an approximately 1 mile long public footpath that traverses the riparian forest along the river’s edge. This protocol was developed to meet the goal of engaging community science volunteers and community partners in data collection in order to help describe the value of streamside habitat to avian species.

Project goals & objectives:
1. Measure bird use of the Cook Park riparian habitat and monitor changes in bird species diversity and abundance as ecological enhancement activities progress at the site.
2. Connect community partners, local birders and community science volunteers to the site by providing community science skill-building and encouraging participation of new birders and constituencies.

Study Season and Frequency:
Our goal is to encourage robust use of the protocol throughout all days and seasons when the park is open to the public. Surveys may be conducted on any date that is convenient for the observer. Surveys may be conducted any time during daylight hours although we encourage conducting them when most birds are at peak activity (early morning).

Observer Requirements:
Observers should attend an orientation and brief training at the site (to be provided at least once per year), have binoculars and/or a spotting scope, and have access to eBird, either through a mobile app to use on-site or through a computer app to be used after the survey is complete.
**Accessibility:**
The survey route follows a mostly unpaved footpath with little to no elevation gain for a one-way distance of approximately 1 mile. Most of the route is heavily shaded. There are public restrooms in the adjacent park.

**Field Procedures:**
Our aim with this protocol is to achieve reasonable standardization of effort among observers, while keeping the methods simple and as close to normal recreational birding as possible and allowing for personal freedom/flexibility.

1. Walk the survey route along the nature trail as shown on **Map A**. This is a one-way survey route.
2. Record all birds seen and heard within the survey area and enter all data into eBird using the hotspot named Cook Park (https://ebird.org/submit/effort?locID=L862672&clr=1)
   a. Only record birds seen or heard within the survey area (riparian corridor) demarcated on the survey map. This includes the vegetation on the west edge of the Tualatin River, the river itself, and the riparian forest on either side of the survey trail to a distance of approximately 150 feet east of the river.
   b. Do record fly-over birds that you suspect are actively using the survey area (e.g. swallow foraging over the river), even if you do not see them land; do not record fly-over birds you believe are bypassing the site entirely (e.g. high-flying flock of geese transiting over the site).
3. You may enter data any way you prefer — directly from the field with an eBird phone app or afterwards from written notes made in the field. Please record time and distance spent on the survey as accurately as possible, and please enter data as soon as possible during or after your visit so as to ensure accuracy. The length of the marked transect is approximately 1.0 miles.
4. **IMPORTANT:** Please make a note in the comments section of your checklist prior to submitting as follows: “**PA Community Science survey.**” You can also enter a brief description of weather conditions during your survey here, especially if you feel the weather had an adverse impact on the presence or detectability of birds.
5. If you would like to eBird other areas of Cook Park, please use a separate eBird checklist after submitting the survey checklist.
Data Analysis: Descriptive analyses will be used to summarize avian abundance and diversity at the site across years and seasons. Species diversity will be assessed using Shannon Diversity index. Species abundance will be a measure of relative abundance per unit effort.

For questions about this project or entering data via eBird contact Joe Liebezeit (jliebezeit@audubonportland.org) or Candace Larson (clarson@audubonportland.org).