

# Field Plan 2020

Proposed field work for summer 2020.

## 1 Schedule

**Mid-late April:** Conduct early-season checks of priority sites to identify locations for trapping/tagging and camera installation.

**May:** Begin trapping and camera installs, prioritizing sites with older nests when possible. First round of pellet/remains collections.

**June:** Finish trapping and camera intalls.

**July/August:** Revisit nests for second round of pellet/remains collections.

**September:** Retrieve cameras. Final round of pellet/remains collections.

## 2 Data collection

### 2.1 Capture & tagging

The goal is to capture and tag six adult goshawks in the SC region. Ideally, both adults in a breeding pair would be tagged, although this will not be possible at most sites. This will add 3-6 new “intensives”.

### 2.2 Nest cameras

The goal is to install cameras at 7 nests in the SC region and 3 nests on VI. This will add at a minimum 4 new intensives (3 on VI, 7 on SC less the 6 already counted via capture). Priority should be given to sites with newly tagged birds, then to sites with previously tagged birds, and finally to sites without any tagged birds)

### 2.3 Physical specimens

Physical specimens should be collected via two protocols:

#### 2.3.1 Opportunistic collections

**Opportunistic collections** are located during goshawk inventory surveys and are not necessarily directly associated with a goshawk nest. These are primarily prey remains from plucking posts (feathers, fur, skeletons, etc) but can include regurgitated pellets. Remains from each location (ie, each pluck post) can be combined in a single bag, but should be kept separate from remains found at other locations. The bag should be labelled with the **date**, surveyor **name/initials**, **GPS coordinates** where they were found, the **site name**, and the collection method (ie, **opportunistic**).

This allows me to know whether the specimens come from a breeding bird (for example, the pluck post may be half a kilometre from the closest nest but if I know the nest was active that year then I know the remains come from a breeding bird’s lunch). The collection method also lets me know that the remains don’t represent a complete picture of the bird’s diet, and that it’s not necessarily representative of what’s eaten at the nest.

### 2.3.2 Systematic collections

**Systematic collections** are gathered from a careful search beneath a known goshawk nest. A careful search should be made of the ground within a 50-m radius around the nest tree. This is best achieved by walking a spiral or radial search pattern outward from the nest tree. Ideally, this search will be made every time a surveyor visits the nest area.

Items from a single visit can be pooled into a single bag, if necessary. However, if possible, keep individual items, especially pellets, separate. Surveyors probably don't carry enough collection bags to make this feasible, so it's ok if things need to be pooled. Try not crush items, particularly pellets. The bag should be labelled with the **date**, surveyor **name/initials**, GPS coordinates of the **nest tree**, the **site name**, and the collection method (ie, **systematic**).

This method is conducted entirely at the discretion of the surveyor. The amount of time and effort required to conduct a "careful" search will vary enormously depending on terrain and vegetation: a steep, brushy site will take longer than a flat, open one. Because of this, there is no point in setting a specific time duration or transect spacing for searches. The goal of a systematic search is to locate most of the prey remains and pellets from the nest site; each surveyor will have to decide for themselves whether they were able to achieve this.

In addition to the difficulties posed by terrain and vegetations, surveyors are short on time and want to minimize stress to the goshawks. **If there isn't time to conduct a careful, systematic search around the nest**, surveyors should collect what they can and label the remains as **opportunistic**. However, they should note that the remains were collected within 50 m of the nest and use the **nest tree coordinates** rather than the collection coordinates.

**The important takeaways:** the most important information is how it was collected (opportunistic or systematic) and where it came from (coordinates of pluck post or coordinates of nest tree).

## 3 Priority sites

### 3.1 South Coast sites

Priority should be placed on adding sites to the coastal zone over the transition zone. Priority should further be given to new sites over sites used in the previous season. Priority should also be given to sites with a longer visit history (ie, more occupancy data).

### 3.2 Vancouver Island sites

TBD