

# Cover Sheet



**Directions:**

On this Cover Sheet, please report information to describe each visit to the site. On the Animal Checklist, please list the species of animals you are looking for at the site and record whether or not you saw or heard that species on each visit. On the Plant and Animal Phenophase Datasheets, please record the phenophases you observed on each visit for your individual plants and your animal species.

**Site:** \_\_\_\_\_  
**Year:** \_\_\_\_\_  
**Observer:** \_\_\_\_\_

Below, please fill in the date and time of your site visit in the first rows. Then, estimate your contribution of time to the project for that visit, separating the time it took you to travel to the site and the time you spent making observations on plants and animals once you arrived at the site. If you are observing animals, report the time you specifically spent searching for animals and circle the appropriate letter for your observation method (there is no need to report time for incidental sightings):

- i** – incidental: chance sighting while not specifically searching
- s** – stationary: standing or sitting at a single point
- w** – walking: a single pass or transect through your site
- a** – area search: multiple passes through your site

If there is snow on the ground or in the canopy (treetops), please make a note of it in the third section and estimate the percent of the ground at your site that the snow is covering. After each visit, please enter the information from these datasheets online.

	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:
<b>Report your contribution of time</b>																
Time spent observing	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min
Time spent in travel	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min
<b>Report your animal observation methods</b>																
Time spent looking for animals	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min	hr min
Animal survey method	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a	i s w a
<b>Report on snow</b>																
Is there snow on the ground?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?
% of ground covered																
Is there snow in the canopy?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?	y n ?
Check when data entered online:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>																



# Trees and Shrubs *Deciduous*



**Directions:** Fill in the date and time in the top rows and circle the appropriate letter in the column below.

**y** (phenophase is occurring); **n** (phenophase is not occurring); **?** (not certain if the phenophase is occurring).

Do not circle anything if you did not check for the phenophase. In the adjacent blank, write in the appropriate measure of intensity or abundance for this phenophase.

**Species:** Celastrus orbiculatus

**Common Name:** oriental bittersweet

**Nickname:** \_\_\_\_\_

**Site:** \_\_\_\_\_

**Year:** \_\_\_\_\_

**Observer:** \_\_\_\_\_

	Date:	Date:	Date:	Date:	Date:	Date:	Date:	Date:
Do you see...	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:
Breaking leaf buds	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Leaves	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Increasing leaf size	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Colored leaves	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Falling leaves	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Flowers or flower buds	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Open flowers	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Fruits	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Ripe fruits	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Recent fruit or seed drop	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____	y n ? ____
Check when data entered online:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>								

# Oriental Bittersweet

(*Celastrus orbiculatus*)



## Phenophase Definitions

### Directions:

As you report on phenophase status (Y, N or ?) on the datasheets, refer to the definitions on this sheet to find out what you should look for, for each phenophase in each species. To report the intensity of the phenophase, choose the best answer to the question below the phenophase, if one is included. Feel free not to report on phenophases or intensity questions that seem too difficult or time-consuming.

## Leaves

### Breaking leaf buds

One or more breaking leaf buds are visible on the plant. A leaf bud is considered "breaking" once a green leaf tip is visible at the end of the bud, but before the first leaf from the bud has unfolded to expose the leaf stalk (petiole) or leaf base.

*How many buds are breaking?*

**Less than 3; 3 to 10; 11 to 100; 101 to 1,000; 1,001 to 10,000; More than 10,000;**

### Leaves

One or more live, unfolded leaves are visible on the plant. A leaf is considered "unfolded" once its entire length has emerged from a breaking bud, stem node or growing stem tip, so that the leaf stalk (petiole) or leaf base is visible at its point of attachment to the stem. Do not include fully dried or dead leaves.

*What percentage of the potential canopy space is full with leaves? Ignore dead branches in your estimate of potential canopy space.*

**Less than 5%; 5-24%; 25-49%; 50-74%; 75-94%; 95% or more;**

### Increasing leaf size

A majority of leaves on the plant have not yet reached their full size and are still growing larger. Do not include new leaves that continue to emerge at the ends of elongating stems throughout the growing season.

*What percentage of full size are most leaves?*

**Less than 25%; 25-49%; 50-74%; 75-94%; 95% or more;**

### Colored leaves

One or more leaves show some of their typical late-season color, or yellow or brown due to drought or other stresses. Do not include small spots of color due to minor leaf damage, or dieback on branches that have broken. Do not include fully dried or dead leaves that remain on the plant.

*What percentage of the potential canopy space is full with non-green leaf color? Ignore dead branches in your estimate of potential canopy space.*

**Less than 5%; 5-24%; 25-49%; 50-74%; 75-94%; 95% or more;**

## **Falling leaves**

One or more leaves with typical late-season color, or yellow or brown due to other stresses, are falling or have recently fallen from the plant. Do not include fully dried or dead leaves that remain on the plant for many days before falling.

## **Flowers**

### **Flowers or flower buds**

One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds or inflorescences that are swelling or expanding, but do not include those that are tightly closed and not actively growing (dormant). Also do not include wilted or dried flowers.

*How many flowers and flower buds are present? For species in which individual flowers are clustered in flower heads, spikes or catkins (inflorescences), simply estimate the number of flower heads, spikes or catkins and not the number of individual flowers.*

**Less than 3; 3 to 10; 11 to 100; 101 to 1,000; 1,001 to 10,000; More than 10,000;**

### **Open flowers**

One or more open, fresh flowers are visible on the plant. Flowers are considered "open" when the reproductive parts (male stamens or female pistils) are visible between or within unfolded or open flower parts (petals, floral tubes or sepals). Do not include wilted or dried flowers.

*What percentage of all fresh flowers (buds plus unopened plus open) on the plant are open? For species in which individual flowers are clustered in flower heads, spikes or catkins (inflorescences), estimate the percentage of all individual flowers that are open.*

**Less than 5%; 5-24%; 25-49%; 50-74%; 75-94%; 95% or more;**

## **Fruits**

### **Fruits**

One or more fruits are visible on the plant. For *Celastrus orbiculatus*, the fruit is a capsule with an outer casing that changes from green to yellow and splits open to expose a fleshy, red "berry". Do not include empty capsules that have already dropped their fleshy, red "berry".

*How many fruits are present?*

**Less than 3; 3 to 10; 11 to 100; 101 to 1,000; 1,001 to 10,000; More than 10,000;**

### **Ripe fruits**

One or more ripe fruits are visible on the plant. For *Celastrus orbiculatus*, a fruit is considered ripe when the outer casing has turned yellow and has split open to expose the fleshy, red "berry". Do not include empty capsules that have already dropped their fleshy, red "berry".

*What percentage of all fruits (unripe plus ripe) on the plant are ripe?*

**Less than 5%; 5-24%; 25-49%; 50-74%; 75-94%; 95% or more;**

### **Recent fruit or seed drop**

One or more mature fruits or seeds have dropped or been removed from the plant since your last visit. Do not include obviously immature fruits that have dropped before ripening, such as in a heavy rain or wind, or empty fruits that had long ago dropped all of their seeds but remained on the plant.

*How many mature fruits have dropped seeds or have completely dropped or been removed from the plant since your last visit?*

**Less than 3; 3 to 10; 11 to 100; 101 to 1,000; 1,001 to 10,000; More than 10,000;**