

# UC Santa Cruz Arboretum Phenology Walk: Datasheets

**For data collection instructions please use instructional booklet.  
Please return completed datasheets to drop box at entrance to Native Plant Garden.**

Name(s): \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Level of expertise (circle):      No plant/botany experience                                  Amateur botanist/gardener  
    Studied plants/botany in high school or college                  Professional botanist                                  Other: \_\_\_\_\_

<i>Corylus cornuta</i> (Hazelnut)							
<b>Phenophase</b>							
<b>Replicate Number</b>	<b>Breaking leaf buds</b>	<b>Colored leaves: % leaves colored yellow (partly or fully) Do not include dead leaves.</b>	<b>Flowers and flower buds: # male catkins and female flowers</b>	<b>Open flowers: % open male catkins and female flowers</b>	<b>Pollen release</b>	<b>Fruits</b>	<b>Ripe fruits</b>
Number 1 (Marker 6)	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 2 (Marker 8)	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 3 (Marker 10)	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 or more N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?

<i>Encelia californica</i> (California brittlebrush)		
	Phenophase	
Replicate Number	Young leaves	Flowers and flower buds: # flower heads
Number 1 (Marker 14)	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?
Number 2 (Marker 15)	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?
Number 3 (Marker 17)	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?

<i>Epilobium canum</i> (Hummingbird trumpet)					
	Phenophase				
Replicate Number:	Leaves	Flowers and flower buds	Open flowers	Fruits	Ripe fruits
Number 1 (Marker 4)	Y N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94% , 95% or more N ?
Number 2 (Marker 9)	Y N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94% , 95% or more N ?
Number 3 (Marker 18)	Y N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94% , 95% or more N ?

<i>Salvia spathacea</i> (Hummingbird sage)			
	Phenophases		
Replicate Number:	Leaves	Flowers and flower buds	Open flowers
Number 1 (Marker 1)	Y N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, more than 1,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 2 (Marker 5)	Y N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, more than 1,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 3 (Marker 16)	Y N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, more than 1,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?

<i>Stipa pulchra</i> (formerly <i>Nassella pulchra</i> ; Purple needlegrass)						
	Phenophase					
Replicate Number:	Leaves	Flower heads	Open flowers	Pollen release	Fruits	Ripe fruits
Number 1 (Marker 2)	Y N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 2 (Marker 3)	Y N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 3 (Marker 13)	Y N ?	Y (circle #): Less than 3, 3-10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5-24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y N ?	Y (circle #): Less than 3, 3 to 10, 11-100, 101-1000, more than 1,000 N ?	Y (circle %): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?

<i>Vaccinium ovatum</i> (California huckleberry)						
Replicate number:	Phenophase					
	Breaking leaf buds	Young leaves	Flowers and flower buds	Open flowers	Fruits	Ripe fruits
Number 1 (Marker 7)	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 2 (Marker 11)	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?
Number 3 (Marker 12)	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?	Y (circle amount): Less than 3, 3 to 10, 11-100, 101-1000, 1,001 to 10,000, more than 10,000 N ?	Y (circle percent): Less than 5%, 5 to 24%, 25-49%, 50-74%, 75-94%, 95% or more N ?

Notes/Questions/Comments: