

Survey Area Conditions

- Control for variation among counts at different sampling units
- Characterize the survey area
- Evaluate the effect of habitat change on shorebird use of a particular site or region
- Index of shorebird habitat conditions at Gray's Harbor and ultimately across the range of wintering shorebirds.

When and Who?

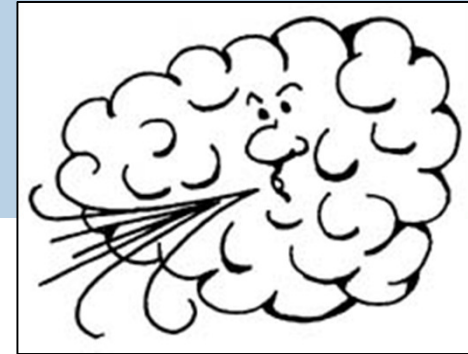
Start / End Time



Observers

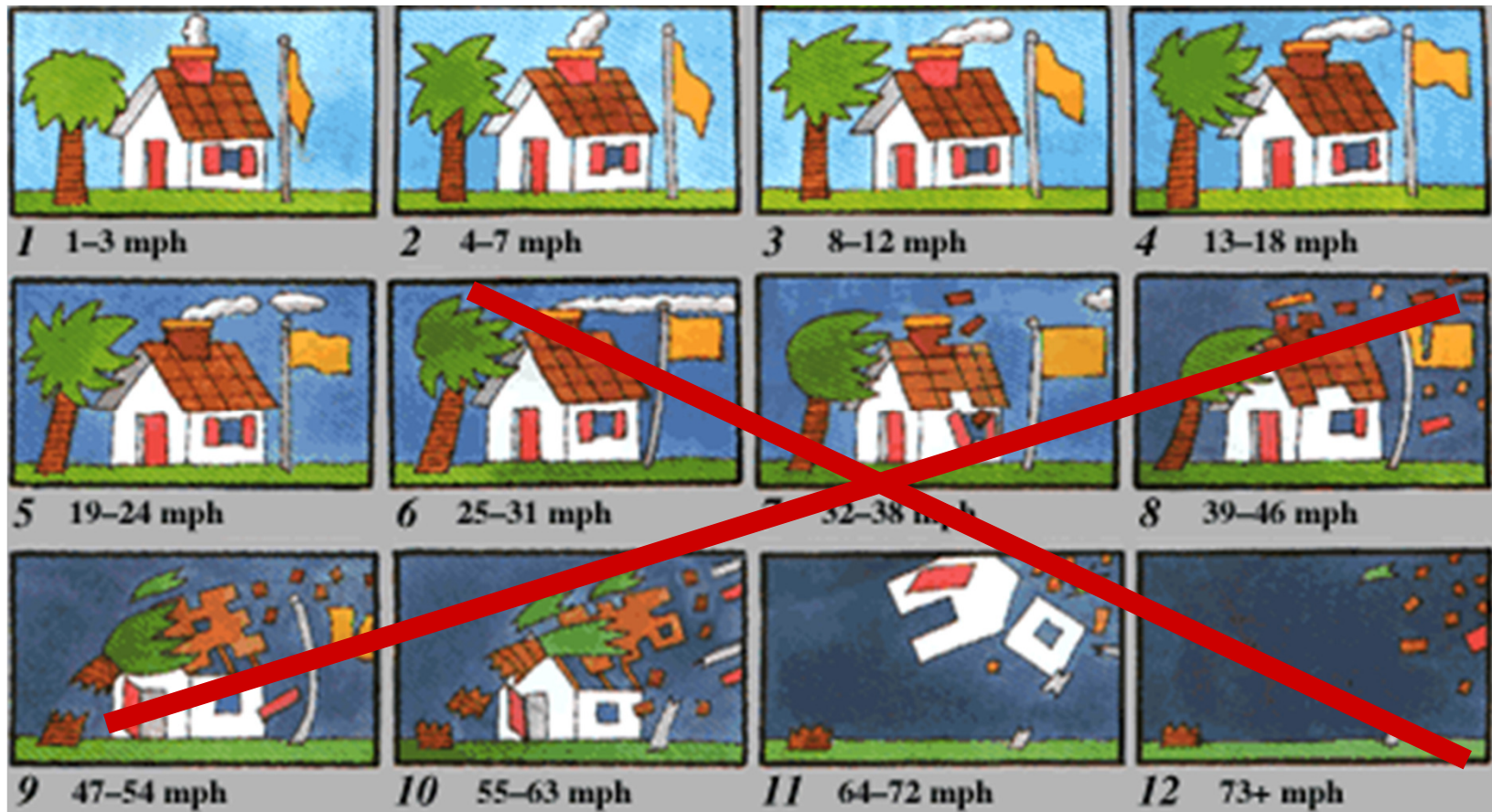


Wind



Wind speed (Wind):

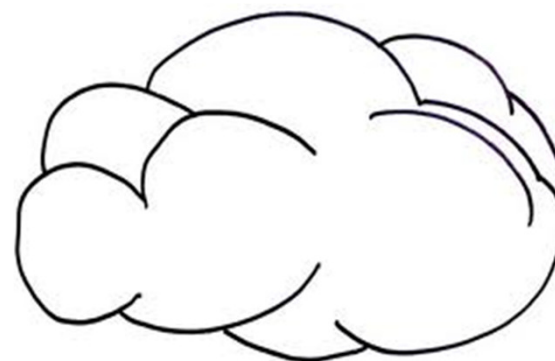
**Do not conduct surveys when wind speed is category 6 or greater.*



Cloud Cover and Precipitation

Cloud cover (**Cloud**):

Enter numeric percentage (0 – 100)



Precipitation (**Precip**):

0 – none

1 – light intermittent; mist, sprinkle, drizzle

2 – fog

3 – steady rain

NOTE: surveys generally should not be conducted in steady rain, but if steady rain occurs after the survey starts, and you are still able to complete the survey, record 3 as the code.



How much of the survey area is visible?

Area Surveyed (Vis Area):

Please indicate the percentage of the survey area you could see and subsequently count birds

Enter numeric percentage (0 – 100)

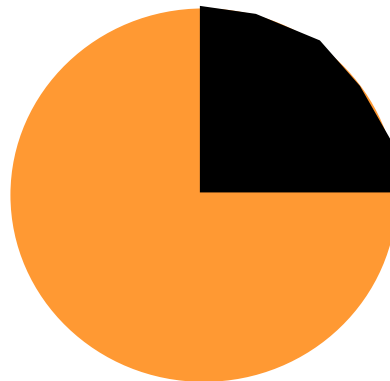
-or-

U– Cannot Determine

Survey Example:

Orange = visible

Black = non-visible



Visible Area = 75%

Habitat type

Cover Type (Type):

** Record the dominant cover type(s) in the survey area, i.e., any habitat that comprises at least 40% of the area. If no cover type is $\geq 40\%$, please describe the composition of cover types in detail in the notes section of the datasheet."*

Example of cover types (see protocol for more detail):

2 – *Rice*

3 – *Pasture*

4 – *Hay*

5 – *Irrigated Row Crop*

10 – *Orchard: trees*

11 – *Forest*

12 – *Developed*



NOTE: add category 18 to datasheet

Flooded

*Percent of visible area with open standing water (**PercFlood**)

*Percent of visible area with bare ground, open dirt or mud (**PercBare**)

Enter numeric percentage (0 – 100)

-or-

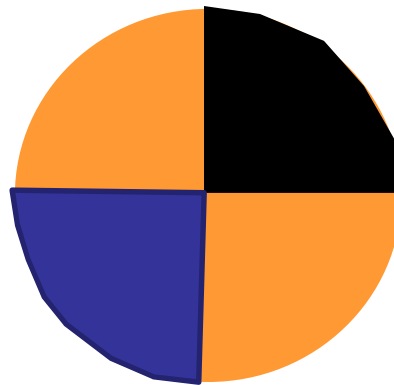
U– Cannot Determine

Survey Example:

Orange = visible bare ground

Blue = visible and flooded

Black = non-visible



Vis Area = 75%
PercFlood = 33%
PercBare = 67%



Vegetation

Percent of visible area with vegetation (**PercVeg**)

Enter numeric percentage (0 – 100)

-or-

U– Cannot Determine

Vegetation Height (VegHt)

**Visual estimate of the average vegetation height in the visible area. If the survey area is flooded, estimate the height of the vegetation emerging from the water.*

0: Bare

1: 1 – 6 in.

2: >6 – 12 in.

3: >12 – 18 in.

4: >18 – 24 in.

5: >24 in.



Why collect this data?

- Habitat conditions of the survey area
- Data to evaluate effect of habitat change on shorebird use
- Provide index to changes in shorebird habitat conditions in the Central Valley and ultimately across the range of wintering shorebirds.

What to take in the field

- Binoculars
- Spotting Scope
- Field Guide(s)
- Protocol & Datasheets
- Pencil
- Maps
- Species List
- Watch
- Water
- Sunscreen
- Permit (if applicable)

