

**Key for assigning sparrow nest fates**

Bolded numbers correspond to fate assignment categories on the nest monitoring datasheet. Chick ages are based on day of hatch = day 0. **This key is only for categorical fate assignment; be sure to also assign quantitative fates based on the last section of the nest fate SOP.** When there is conflicting evidence, use fates with unknown cause (6, 7, or 9), as appropriate.

1 - At previous visit, chicks 9+ days old (5)

1 - At previous visit, chicks <9 days old (2)

2 - At current visit, chicks day 9+ (8)\*

2' - At current visit, chicks < day 9 (13)\*

2'' - At current visit, chicks day 8 (17)\*

5 - Spring tide or heavy rainfall before visit (6)

5' - No spring tide or heavy rainfall before visit (7)

6 - Evidence of flooding (partially or completely flooded = **2** or **3**)

- the nest is observed underwater during a high tide and a subsequent nest check confirms that the nest is missing contents
- the nest is found with intact eggs outside the nest
- the nest is found with intact cold or dirty eggs in the nest, and eggs do not subsequently hatch
- the nest is found with intact dead chicks in, or close to, the nest
- the nest is found with barely-alive nestlings
- the nest is found to be empty and soaking wet immediately (next day) after a high tide, and was known to have been active immediately prior to the high tide

6' - No evidence of flooding (7)

7 - Evidence of depredation (partially or completely depredated = **4** or **5**)

- the nest is found with its structure pulled apart
- the nest is found with obvious depredation remains
- dead chicks or eggs are found with injuries that likely resulted in death
- the nest is found empty, or with partial loss, on a day when the tides could not have accounted for the losses

7' - No evidence of depredation (fledged = **8**)

8 - No eggs/chicks missing, cold, or past hatch date (active = **1**)

8' - At least one egg/chick missing, cold, or past hatch date (9)

9 - Spring tide or heavy rainfall before visit (10)

9' - No spring tide or heavy rainfall before visit (11)

\* if nest is empty the criteria in step 2 are interpreted as the chicks *would have been* day X

## 10 - Evidence of flooding (partially or completely flooded = 2 or 3)

- the nest is observed underwater during a high tide and a subsequent nest check confirms that the nest is missing contents
- the nest is found with intact eggs outside the nest
- the nest is found with intact cold or dirty eggs in the nest, and eggs do not subsequently hatch
- the nest is found with intact dead chicks in, or close to, the nest
- the nest is found with barely-alive nestlings
- the nest is found to be empty and soaking wet immediately (next day) after a high tide, and was known to have been active immediately prior to the high tide

## 10' - No evidence of flooding (11)

## 11 - Evidence of depredation (partially or completely depredated = 4 or 5)

- the nest is found with its structure pulled apart
- the nest is found with obvious depredation remains
- dead chicks or eggs are found with injuries that likely resulted in death
- the nest is found empty, or with partial loss, on a day when the tides could not have accounted for the losses

## 11' - No evidence of depredation (12)

## 12 - Nest intact, well worn, with some droppings in the nest or immediately adjacent (fledged = 8)

## 12' - Conflicting evidence (unknown if successful or failed = 9)

## 13 - No eggs/chicks missing, cold, or past hatch date (active = 1)

## 13' - At least one egg/chick missing, cold, or past hatch date (14)

## 14 - Spring tide or heavy rainfall before visit (15)

## 14' - No spring tide or heavy rainfall before visit (16)

## 15 - Evidence of flooding (partially or completely flooded = 2 or 3)

- the nest is observed underwater during a high tide and a subsequent nest check confirms that the nest is missing contents
- the nest is found with intact eggs outside the nest
- the nest is found with intact cold or dirty eggs in the nest, and eggs do not subsequently hatch
- the nest is found with intact dead chicks in, or close to, the nest
- the nest is found with barely-alive nestlings
- the nest is found to be empty and soaking wet immediately (next day) after a high tide, and was known to have been active immediately prior to the high tide

## 15' - No evidence of flooding (16)

## 16 - Evidence of depredation (partially or completely depredated = 4 or 5)

- the nest is found with its structure pulled apart
- the nest is found with obvious depredation remains
- dead chicks or eggs are found with injuries that likely resulted in death
- the nest is found empty, or with partial loss, on a day when the tides could not have accounted for the losses

## 16' - No evidence of depredation (partial or complete failure, unknown cause = 6 or 7)

\* if nest is empty the criteria in step 2 are interpreted as the chicks *would have been* day X

17 - No eggs/chicks missing, cold, or past hatch date (active = **1**)

17' - At least one egg/chick missing, cold, or past hatch date (18)

18 - Spring tide or heavy rainfall before visit (19)

18' - No spring tide or heavy rainfall before visit (20)

19 - Evidence of flooding (partially or completely flooded = **2 or 3**)

- the nest is observed underwater during a high tide and a subsequent nest check confirms that the nest is missing contents
- the nest is found with intact eggs outside the nest
- the nest is found with intact cold or dirty eggs in the nest, and eggs do not subsequently hatch
- the nest is found with intact dead chicks in, or close to, the nest
- the nest is found with barely-alive nestlings
- the nest is found to be empty and soaking wet immediately (next day) after a high tide, and was known to have been active immediately prior to the high tide

19' - No evidence of flooding (20)

20 - Evidence of depredation (partially or completely depredated = **4 or 5**)

- the nest is found with its structure pulled apart
- the nest is found with obvious depredation remains
- dead chicks or eggs are found with injuries that likely resulted in death
- the nest is found empty, or with partial loss, on a day when the tides could not have accounted for the losses

20' - No evidence of depredation (unknown if successful or failed = **9**)

#### Status categories

1 = active

2 = partially flooded

3 = completely flooded

4 = partially depredated

5 = completely depredated

6 = partial failure, unknown cause

7 = complete failure, unknown cause

8 = fledged

9 = unknown if successful or failed

10 = never had eggs

\* if nest is empty the criteria in step 2 are interpreted as the chicks *would have been* day X