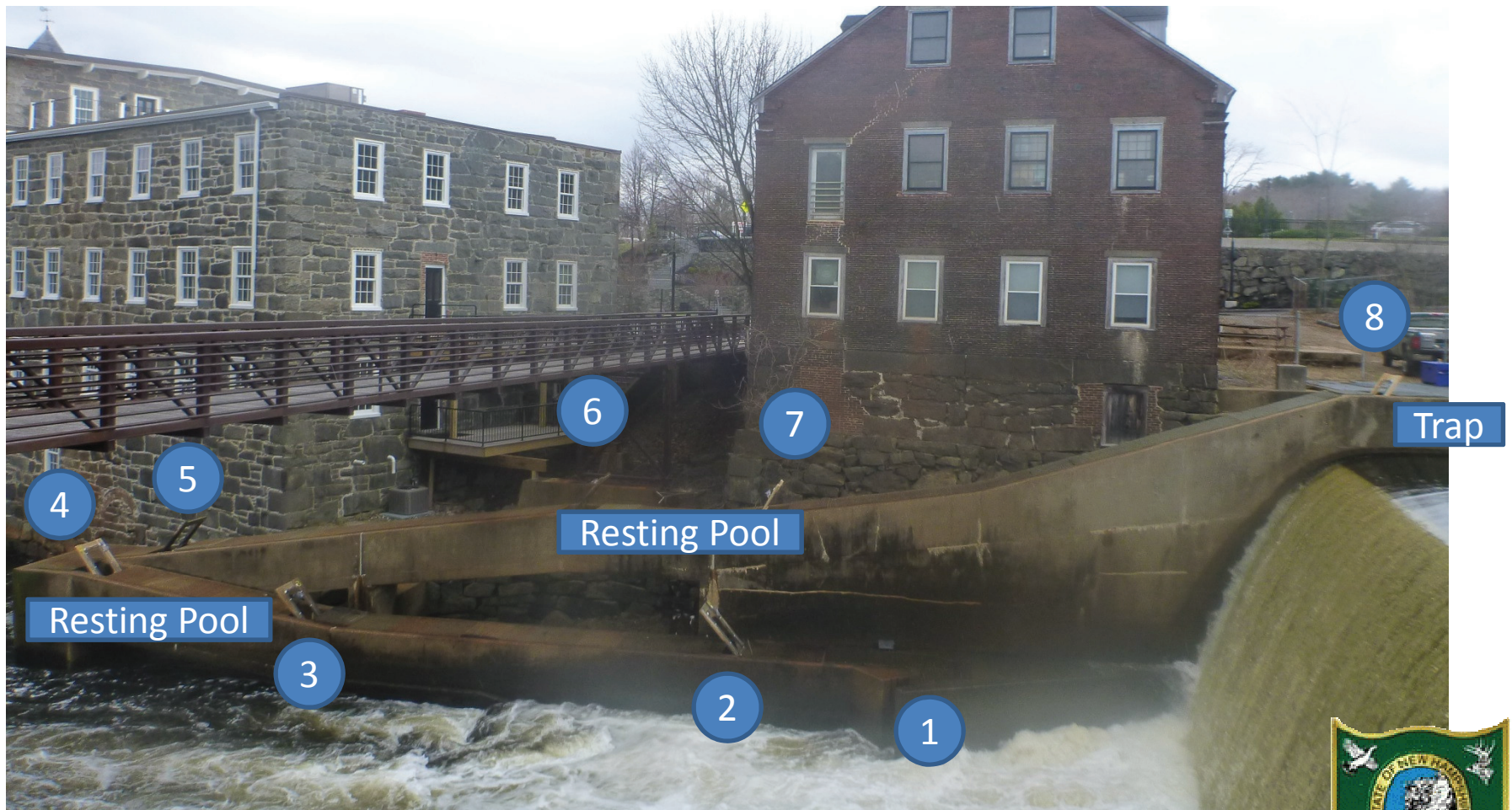


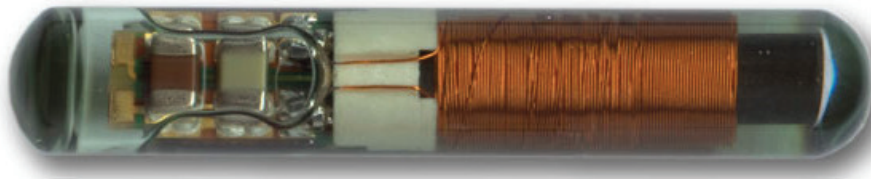
PIT Tagging Study (2013-2015)



PIT Tagging Study (2013-2015)



Tagging



- Tagged 1,171 RH
- 23 mm HDX PIT tags (23 x 3.65mm; 0.6 g wt)
- Intraperitoneally
- 2% Rule:
 - Weights: 136 to 367 g
 - Mean: 258 g (2% = 5.2g)
- Recorded species, sex, Total Length
- Generally < 30s
- Recovery tank
- Released at tagging site



Data Collection/Coverage

- 2013:
 - Continuous coverage May 1st to June 12th (43 days)
 - Single Interruption of 4.7 hrs (0.5% of study period)
- 2014:
 - Continuous coverage April 25 to June 20 (57 days)
- Each detection recorded: Antenna, Tag#, Date/Time
- Data downloaded remotely
 - 1,673,509 fish detections recorded 2013
 - 8,832,418 fish detections recorded 2014



Passage Efficiency: Attraction

- High at beginning of run, 62% to 82%
- Quickly declines after first 2 weeks
- 35% to 59% for the season

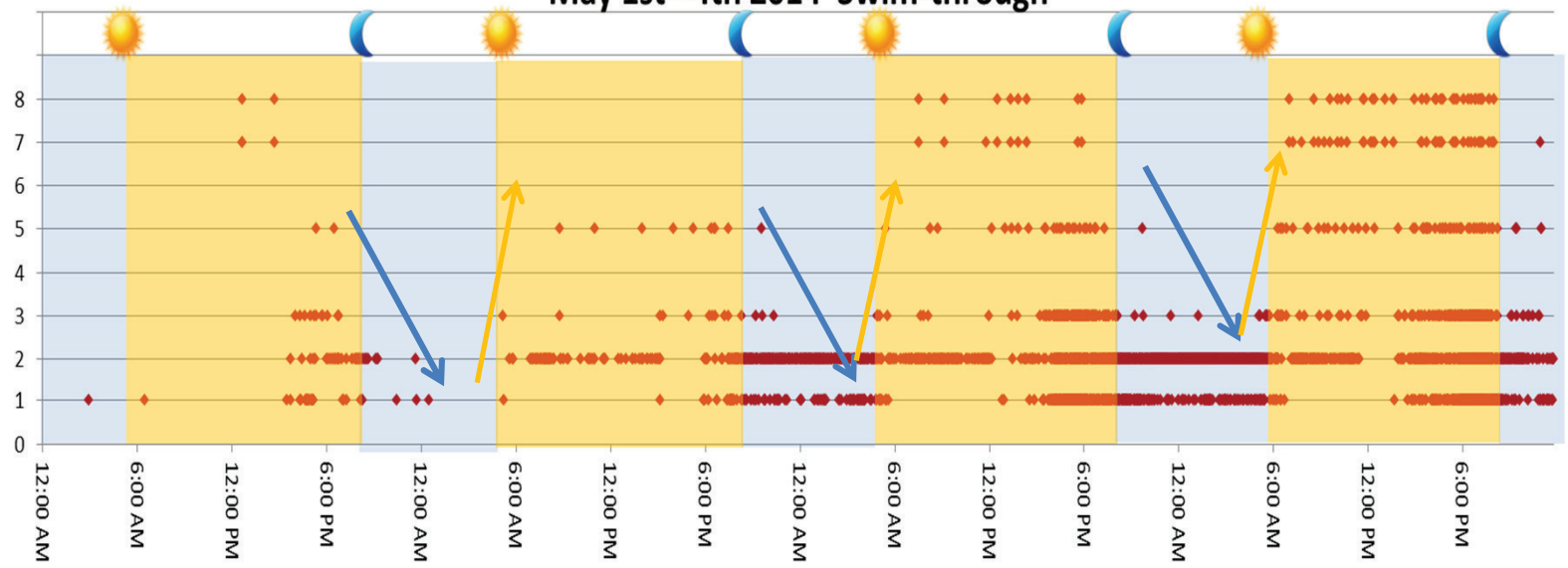


Passage Efficiency

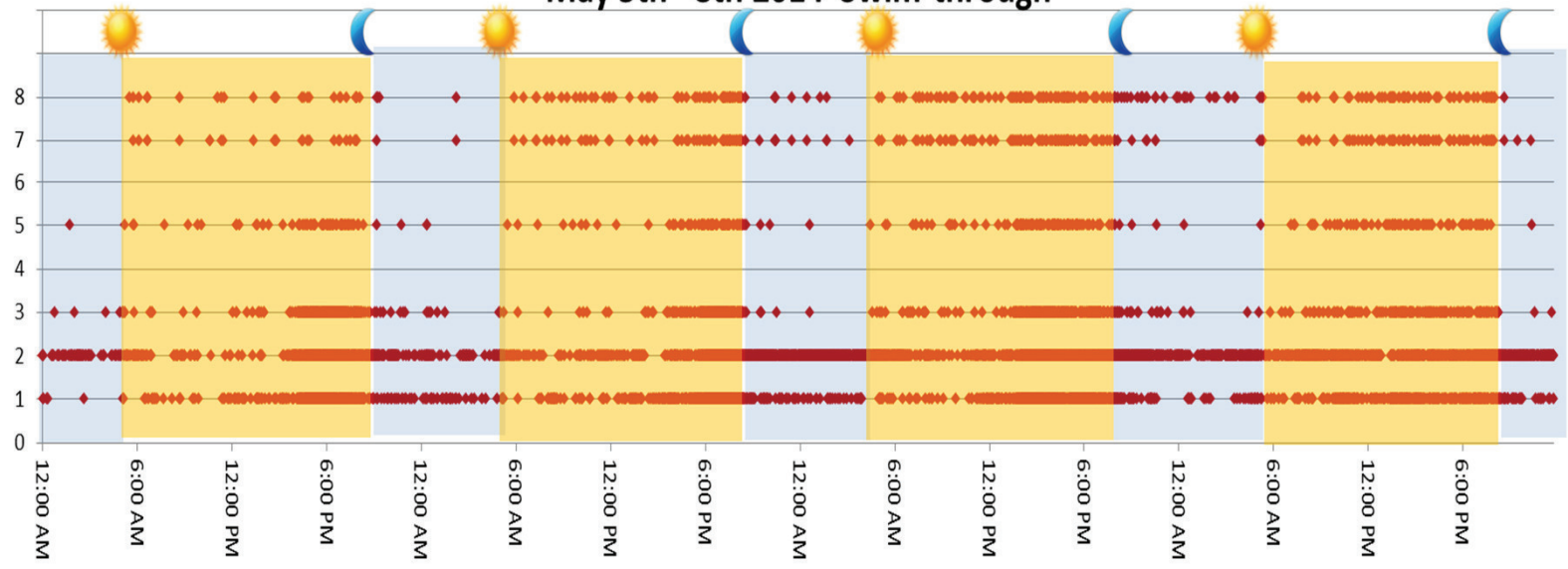
- Entries:
 - Fish entered up to 34 times
 - Average:
 - 2013= 4 entries
 - 2014= 3.4 entries
- Attempts:
 - Passed = 1.8 attempts
 - Did Not Pass = 1.3 attempts
- Passage Efficiency = 71%
 - Best estimates from fish tagged year earlier
 - 59% Attraction * 71% Passage = 42% Success
- Interesting:
 - Reached the trap up to 4 times without passing
 - Remained in trap from 1 minute to 47 hrs before descending



May 1st - 4th 2014 Swim-through



May 5th - 8th 2014 Swim-through



Daily Movements

- Activity begins at sunrise
- As the sun sets, fish begin descending
- Some fish will remain in the resting pools overnight, but do not attempt to ascend
- Movements: 97% are during daylight hours
- Fish will ascend and descend the ladder multiple times in a single day





