2021 Olympic Project Nest Area Long Term Recorder 'lite' Analysis

The following Analysis is from 'Year One' of both the LTR and SM4 Recording devices at the Olympic Project's Nest Area. The recorders and the subsequent logging of all vocalizations made by Olympic Project member Chris Spencer, managed to identify multiple species of Bird, Mammal and Amphibian.

The recording project started on March 20th and managed to record 176 total nights (57.5%) to December 31st, without technical issues or issues with weather conditions.

Of those nights, we have multiple 'Unknown' and potentially 'Target Subject' recordings, from a total of 72 different nights (40.9%).

August (64.5%), March (58.3% and September (46.7%) saw above average numbers of 'Unknown' and potentially 'Target Subject' recordings, with both August and September seeing 100% of nights with fully operational recording devices.

Species Recorded

A list of all Bird and Mammal species recorded throughout the 2021 recording process, and the cataloging and subsequent part analysis of 1,831 multiple species recordings.

Bird Species Recorded

- Barred Owl
- Saw Whet Owl
- Great Horned Owl
- Loon
- Canadian Geese
- American Robin
- Band Tailed Pigeon
- Eurasian Dove
- Nighthawk
- Pileated Woodpecker
- Raven
- Rooster
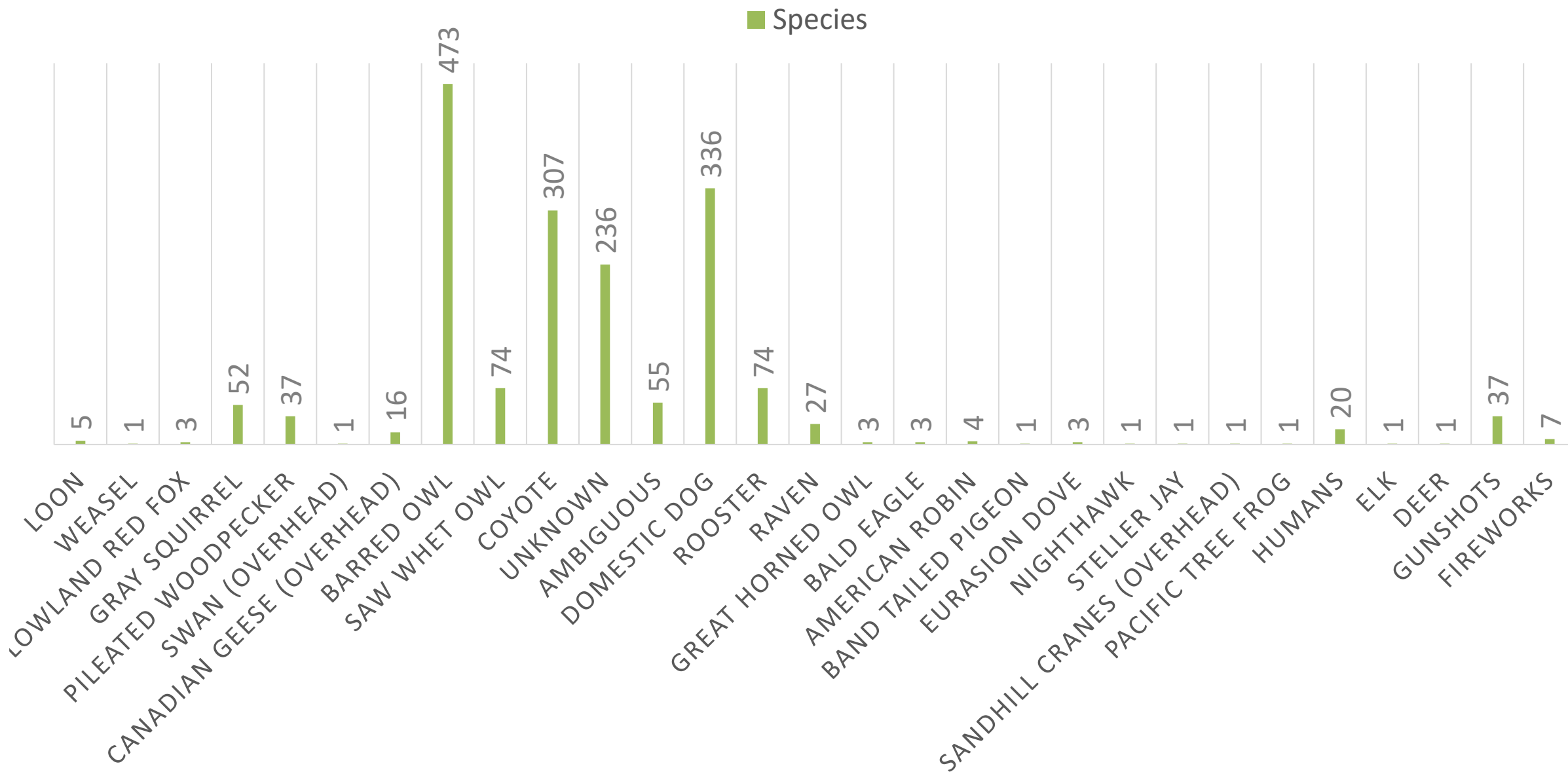- Steller Jay
- Bald Eagle
- Swans

Mammal Species Recorded

- Black Bear
- Coyote
- Weasel
- Lowland Red Fox
- American Red Squirrel

NUMBER OF VOCALIZATIONS RECORDED PER SPECIES

Species

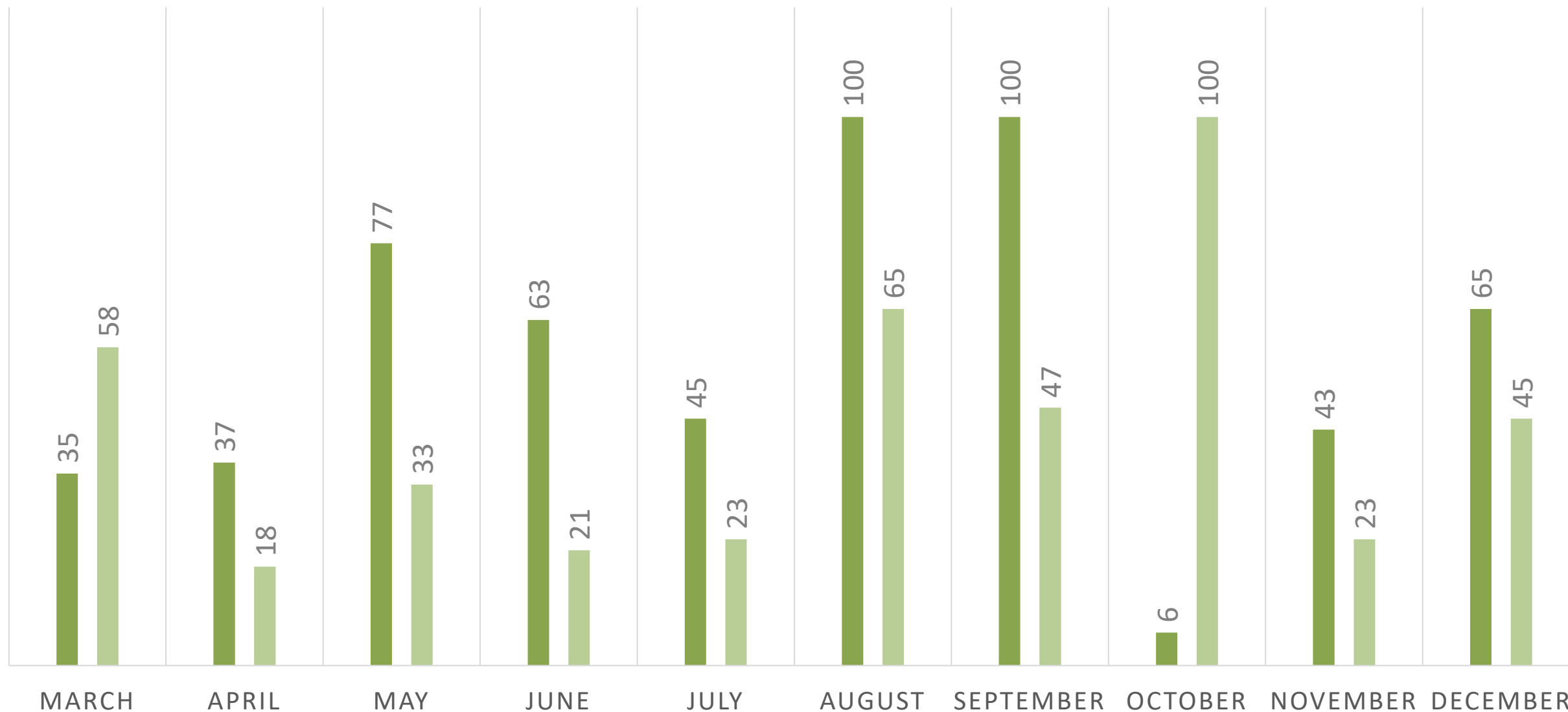| Species	Count
LOON	5
WEASEL	1
LOWLAND RED FOX	3
GRAY SQUIRREL	52
PILEATED WOODPECKER	37
SWAN (OVERHEAD)	1
CANADIAN GEESE (OVERHEAD)	16
BARRED OWL	473
SAW WHET OWL	74
COYOTE	307
UNKNOWN	236
AMBIGUOUS	55
DOMESTIC DOG	336
ROOSTER	74
RAVEN	27
GREAT HORNED OWL	3
BALD EAGLE	3
AMERICAN ROBIN	4
BAND TAILED PIGEON	1
EURASION DOVE	3
NIGHTHAWK	1
STELLER JAY	1
SANDHILL CRANES (OVERHEAD)	1
PACIFIC TREE FROG	1
HUMANS	20
ELK	1
DEER	1
GUNSHOTS	37
FIREWORKS	7

'Unknown' Recordings

'Unknown' Recordings include suspect whistles, suspect percussive's (knocks) and various suspect vocalizations such as screams, whoop's, hoot's, roar's and non-human mumblings.

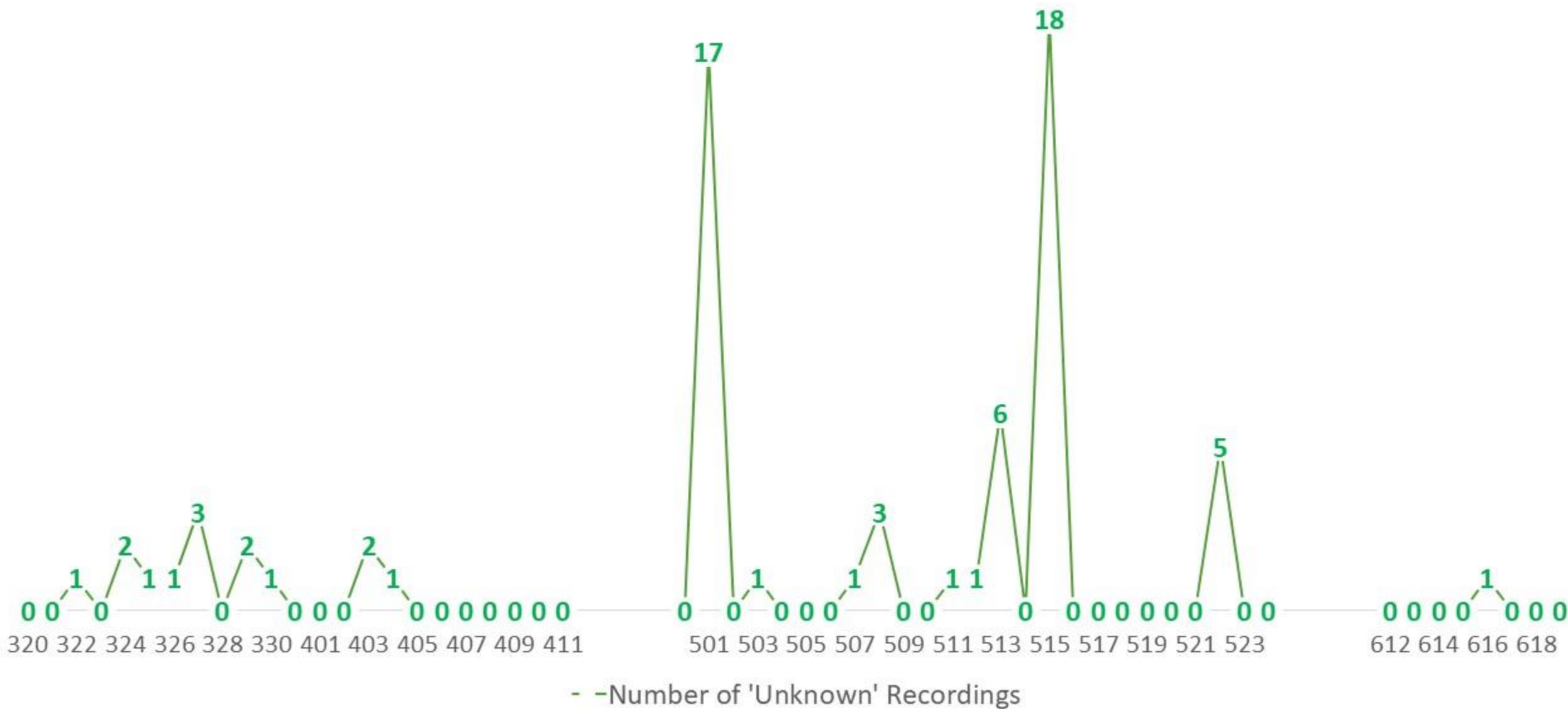We have a total of 236 'Unknown' recordings, from March 20th 2021 to December 31st 2021.

Percentage of 'Unknown' recordings – Takeaways

The months of August and September (seasonal changeover month) saw 100% of nights recorded, with 65% and 47% of nights having 'Unknown' recordings, respectively, averaging recordings on 54% of nights within those months. Two other consecutive months, May and June (seasonal changeover month) are among the months with the highest percentage of nights recorded, with a much lower amount of nights with 'Unknown' recordings, at 33% and 21% respectively.

The Seasons

SPRING - NUMBER OF 'UNKNOWN' RECORDINGS BY DATE

- – Number of 'Unknown' Recordings

Spring Number of 'Unknown' recordings by date - Takeaways

Spring can be split in to three blocks of recording times due to non operational equipment, for specific periods of time. Block 1 from March 20th (320) to April 11th (411), Block 2 from May 1st (501) to May 23rd (523) and Block 3 from June 12th (612) to June 18th (618). Block 2 saw some very prominent activity including the night of 'Chimpfit' (May 1st) and another high recording night exactly two weeks later, on May 15th. Combined, these two nights alone make up a total of 54% of all of Spring's 65 recordings.
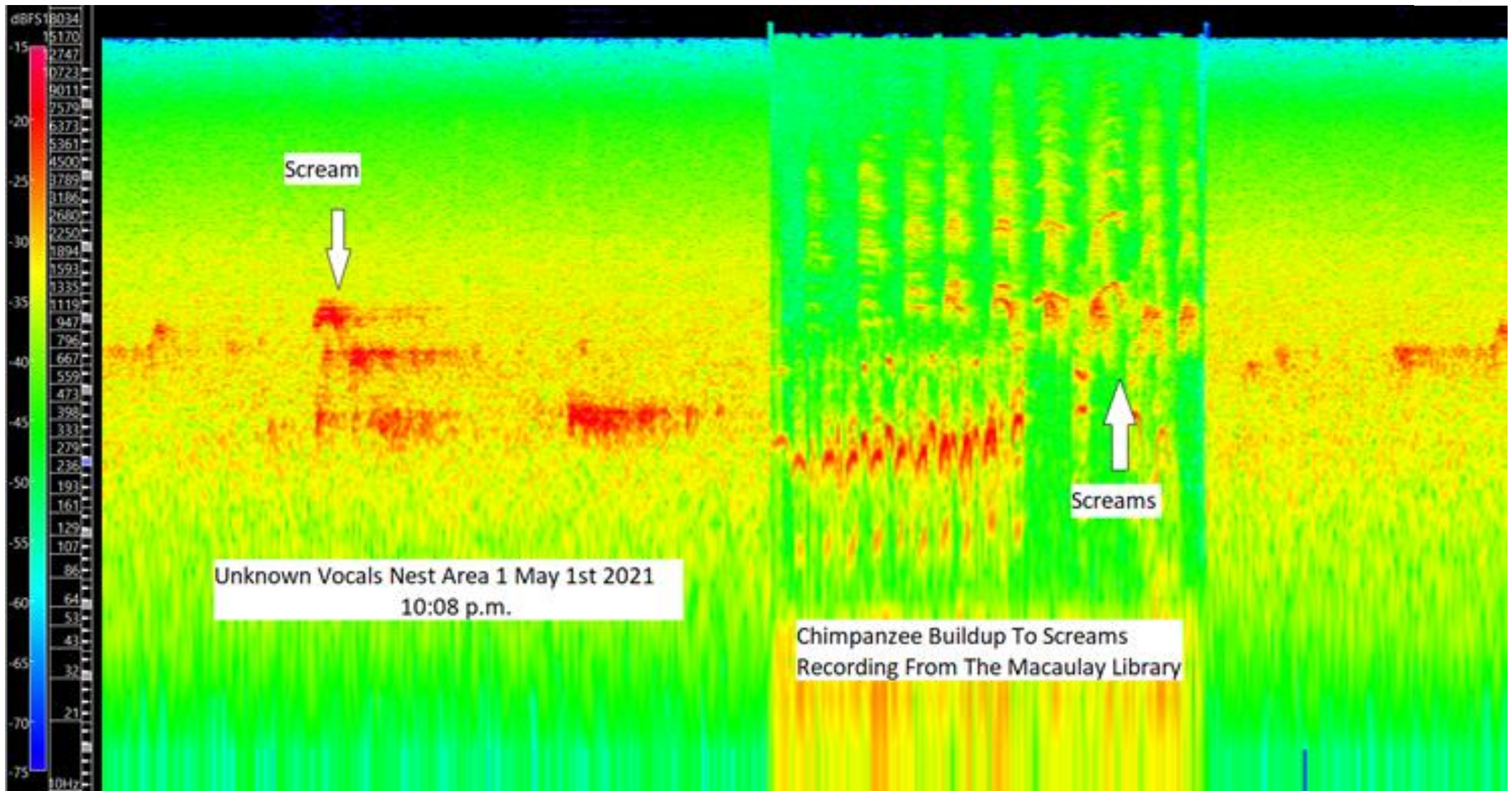
Spring did not see any longer than 7 nights (405-411) without recording 'Unknown' sounds, with 56 total nights recorded.
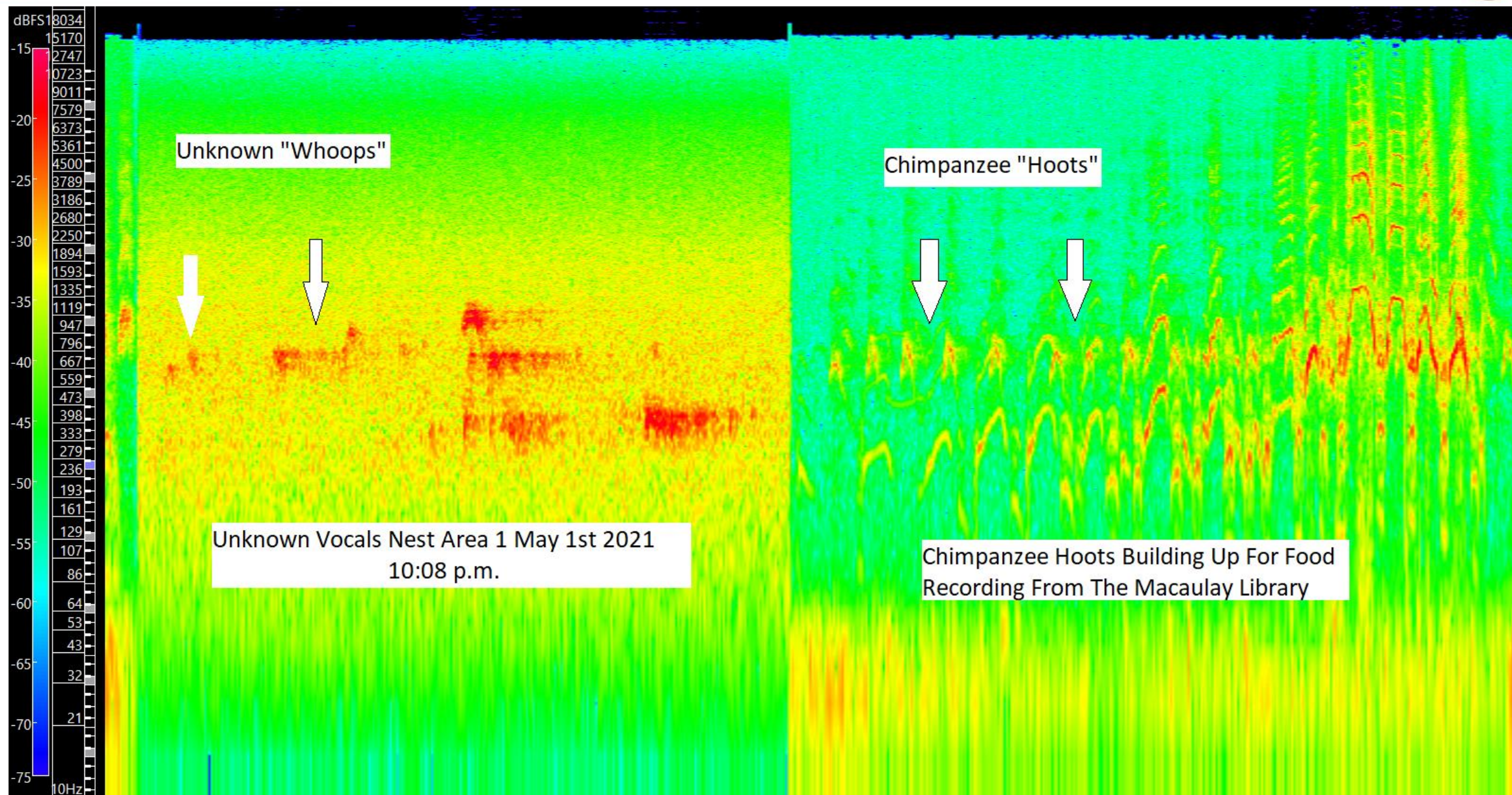
The story of 'Chimpfit'

From the night of May 1st and in to the early hours of May 2nd, there were a total of 17 'Unknown' recordings including Howls, Percussive's, Hoots, Whoops and Screams, and the night was ultimately coined by Olympic Project member Chris Spencer, as 'Chimpfit'.

For an in-depth look at the spectrographic analysis done on the vocalizations recorded on this night, click the following - 'Chimpfit'.
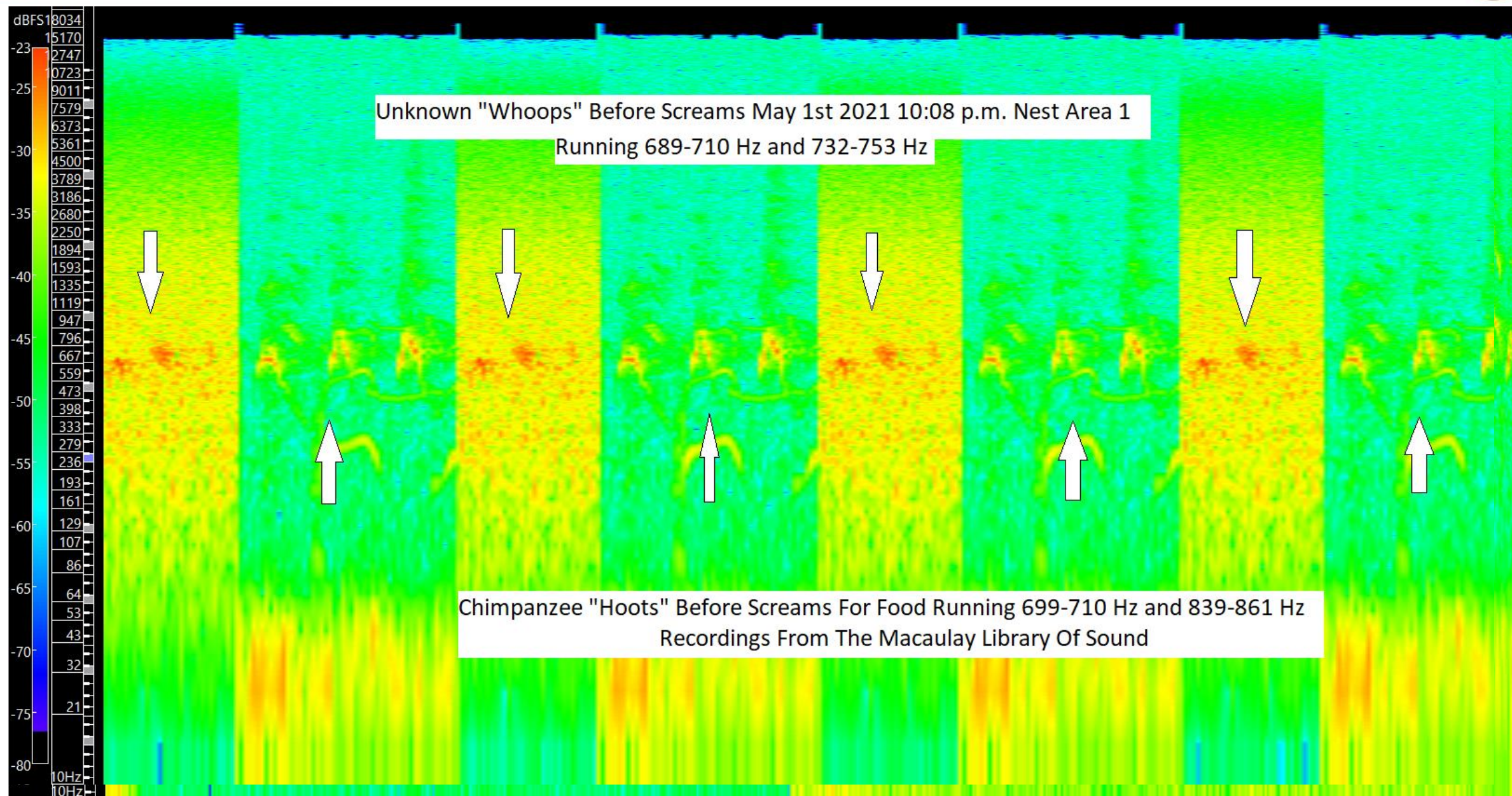
An 8 consecutive hour timeline for 'Chimpfit' can be found on the following pages.

Scream

Screams

Unknown Vocals Nest Area 1 May 1st 2021
10:08 p.m.

Chimpanzee Buildup To Screams
Recording From The Macaulay Library

Unknown "Whoops" Before Screams May 1st 2021 10:08 p.m. Nest Area 1
Running 689-710 Hz and 732-753 Hz

Chimpanzee "Hoots" Before Screams For Food Running 699-710 Hz and 839-861 Hz
Recordings From The Macaulay Library Of Sound

Chimp Fit

Squatchermetrics
Your Sasquatch Research Data Solution

OLYMPIC PROJECT BIGFOOT EXPEDITIONS

VOCALIZATION TIMELINE
9:30pm to 11:30pm

- 9:50pm Unknown Howl
- 9:59pm Unknown Whistles
- 10:08pm Unknown Scream
- 10:09pm Unknown Howl
- 10:12pm Coyote Warning Call
- 10:25pm Coyote Warning Call
- 10:56pm Unknown Vocal
- 10:56pm Unknown Percussive
- 11:01pm Unknown Howl
- 11:10pm Unknown Howl
- 11:18pm Unknown Vocal
- 11:20pm Unknown Vocal
- 11:22pm Unknown Scream to Yell

7:30pm–9:30pm

11:30pm–1:30am

VOCALIZATION TIMELINE
1:30am to 3:30am

- 01:48 Coyote Warning Call
- 02:36 Coyote Warning Call
- 03:16 Coyote Warning Call
- 03:25 Coyote Warning Call

3:30am–5:30am

VOCALIZATION TIMELINE
7:30pm to 9:30pm

- 7:27pm Unknown Scream
- 7:40pm Unknown Scream
- 7:53pm Coyote Warning Call

9:30pm–11:30pm
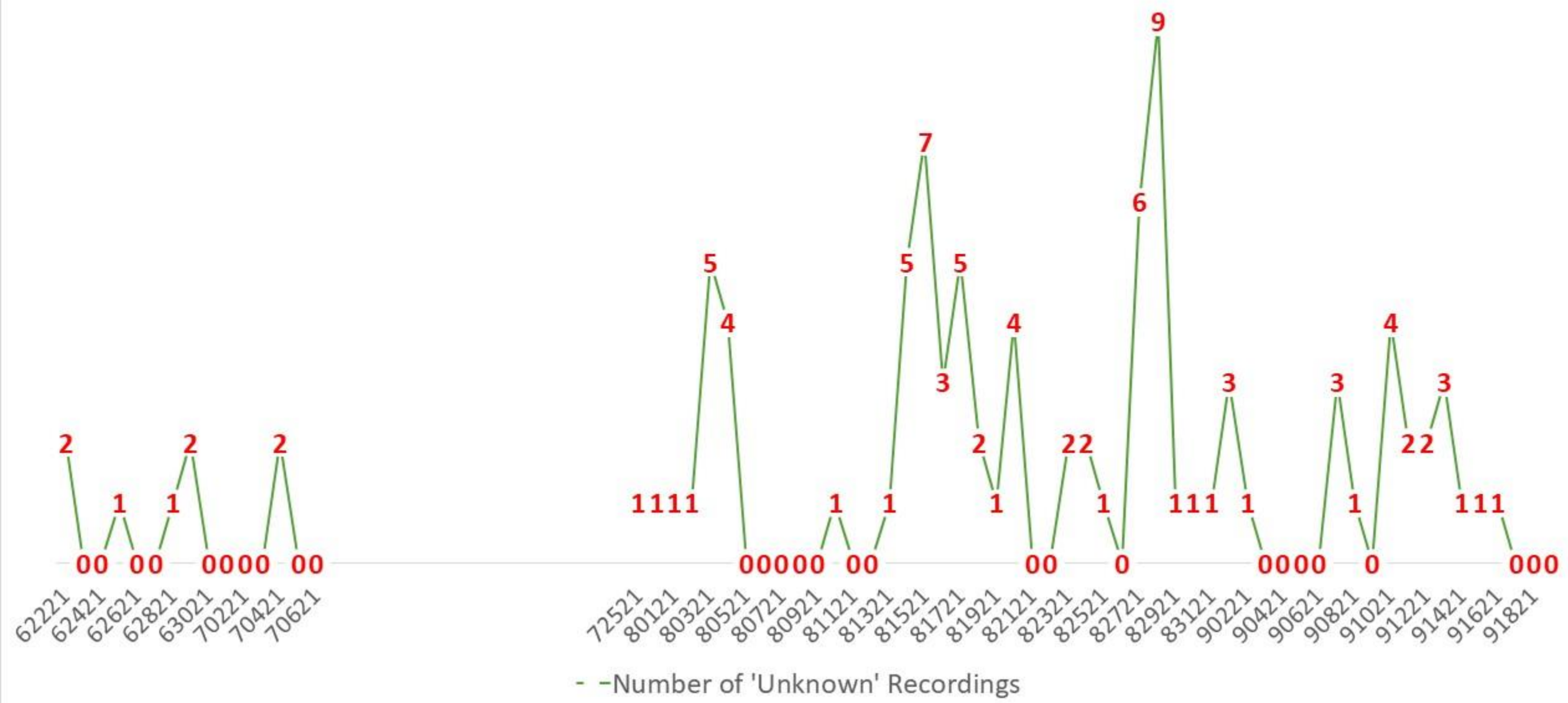
VOCALIZATION TIMELINE
11:30pm to 1:30am

- 12:09am Unknown Howl
- 12:09am Coyote Yip
- 12:18am Coyote Locator/Warning Call
- 12:21am Unknown Vocal
- 12:21am Unknown Scream
- 12:21am Unknown Percussive
- 12:48am Coyote Warning Call
- 01:15am Coyote Warning Call

1:30am–3:30am

VOCALIZATION TIMELINE
3:30am to 5:30am

- 04:42 Coyote Warning Call
- 04:47 Coyote Warning Call
- 05:02 Coyote Warning Call

SUMMER – NUMBER OF UNKNOWN RECORDINGS BY DATE
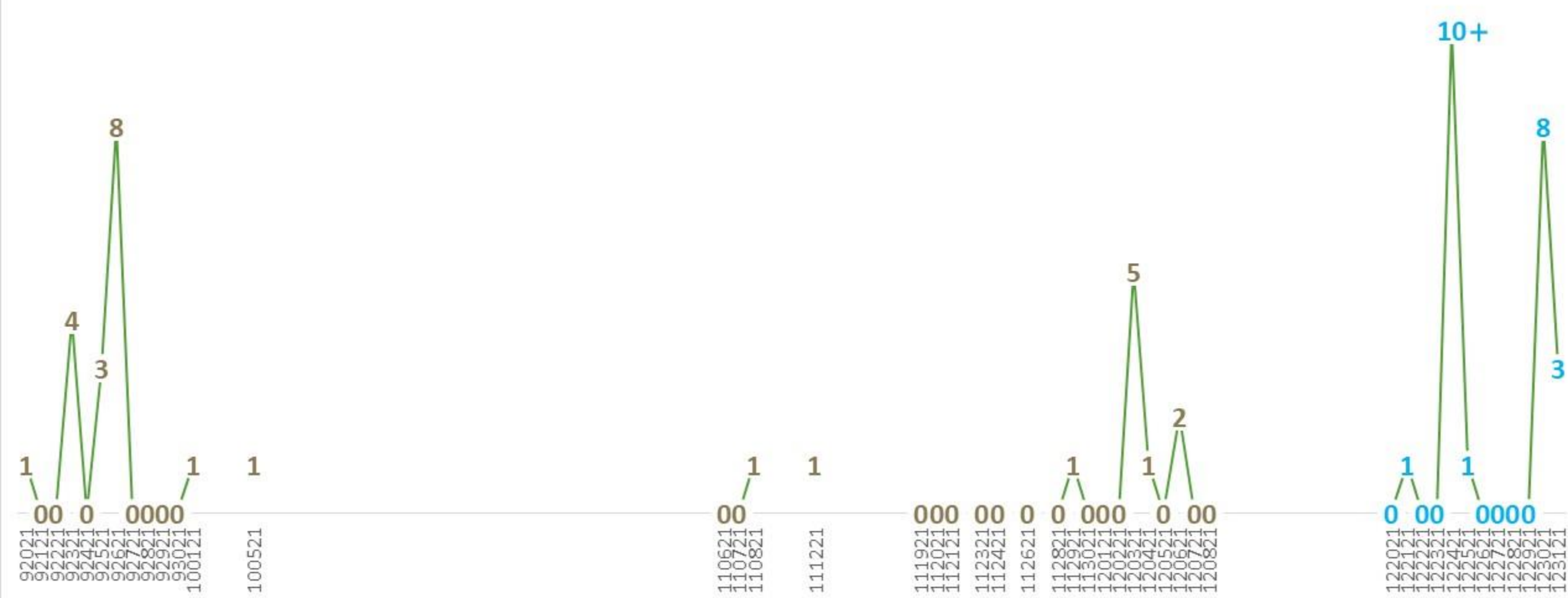
Number of 'Unknown' Recordings

Summer Number of 'Unknown' recordings by date - Takeaways

Summer can be split in to two blocks of recording times due to non operational equipment, for specific periods of time. Block 1 from June 22nd (622) to July 6th (706) and Block 2 from July 25th (725) to the last day of Summer, September 19th (919, not visible due to 'every second day' dates in the chart). Block 2 includes 100% of nights recorded in both August and September. Mid August is interesting for a number of reasons. The longest period of nights with no 'Unknown' recordings across the Summer (805-809), is part of 8 consecutive nights with only a single night with 'Unknown' recordings, which is then followed by 8 consecutive nights of 'Unknown' recordings.

Summer did not see any longer than 5 nights (805-809) without recording 'Unknown' sounds, with 67 total nights recorded.

FALL/SUMMER - NUMBER OF 'UNKNOWN' RECORDINGS

Fall/Winter Number of 'Unknown' recordings by date - Takeaways

Fall/Winter was largely disrupted due to technical issues to the recorders and inclement weather conditions. Of the very few nights of Winter that was recorded however, we saw the years biggest number of 'Unknown' recordings (27) on a single night, on 122421. Who knows, perhaps the residents were a little excited about Santa's impending visit..;)
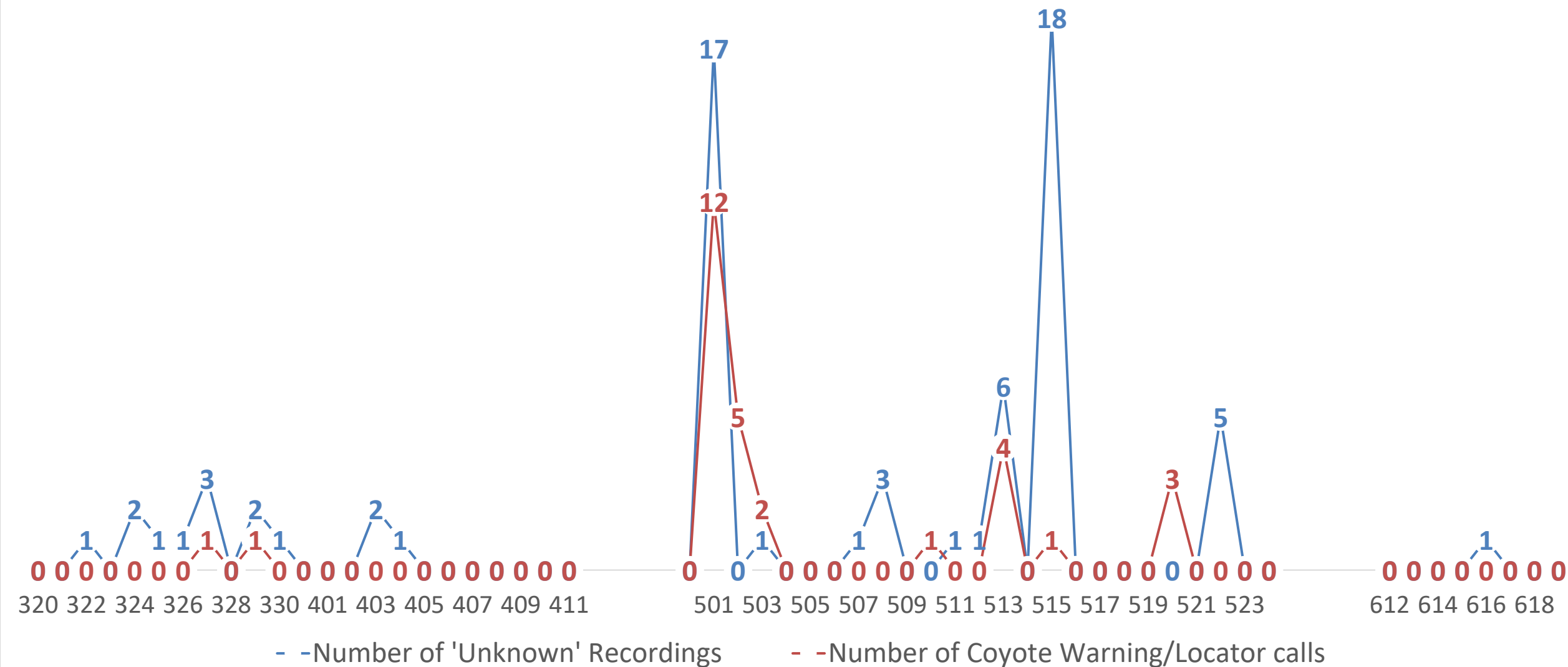
Fall/Winter did not see any longer than 4 nights (927-930) without recording 'Unknown' sounds', with 46 total nights recorded.

Interspecies Correlations

The following pages focus on a stand out pattern/trend, seen over and over again at the nest area. Coyote warning/location calls either preceding or following 'Unknown' recordings, within a 24 hour period.

SPRING – 'UNKNOWN' AND COYOTE WARNING/LOCATOR CALL CORRELATION

- - Number of 'Unknown' Recordings   - - Number of Coyote Warning/Locator calls
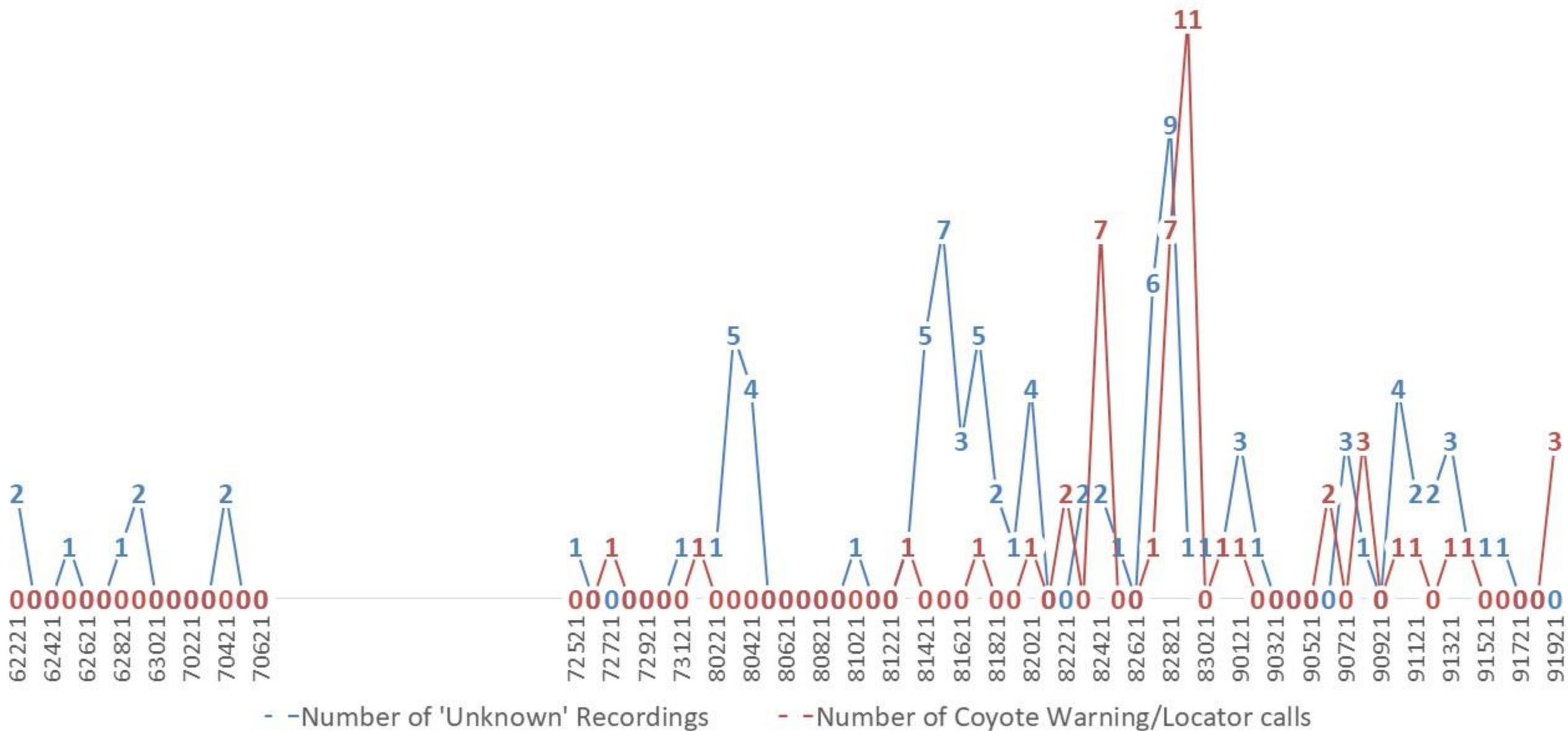
Spring Unknown and Coyote Warning/Locator call correlation

Spring see's 88.9% of Coyote Warning/Locator calls (38 in total) coming from on the same night or within 24 hours of 'Unknown' vocalizations/percussive's/whistles etc being recorded.

The night of 'Chimpfit' (501) saw 40% of Coyote Warning/Locator calls alone, as well as 25% of 'Unknown' recordings, for Spring in total.

SUMMER – 'UNKNOWN' AND COYOTE WARNING/LOCATOR CALL

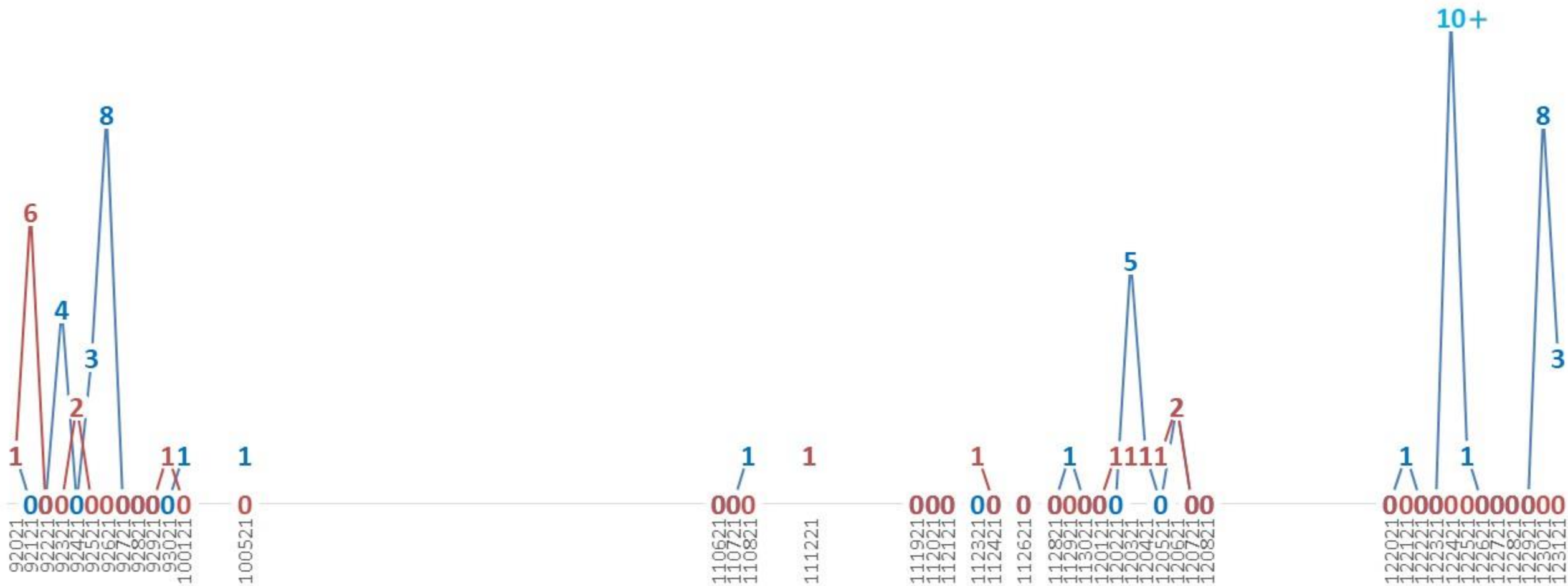- − Number of 'Unknown' Recordings   - − Number of Coyote Warning/Locator calls

Summer Unknown and Coyote Warning/Locator call correlation

Summer see's 94.7% of Coyote Warning/Locator calls (57 in total) coming from on the same night or within 24 hours of 'Unknown' vocalizations/percussive's/whistles etc being recorded.

The two consecutive nights of 828 and 829 saw 42.8% of all Coyote Warning/Locator calls alone, as well as the night (828) that saw the most 'Unknown' recordings (9), for Summer in total.

FALL/WINTER - 'UNKNOWN' AND COYOTE WARNING/LOCATOR CALLS CORRELATION

- - Number of 'Unknown' Recordings   - - Number of Coyote Warning/Locator Calls

Fall/Winter Unknown and Coyote Warning/Locator call correlation

The Fall/Winter period see's 91% (11/12 nights) of Coyote Warning/Locator calls (18 in total) coming from on the same night or within 24 hours of 'Unknown' vocalizations/percussive's/whistles etc being recorded. It should be noted that there was actually no Coyote Warning/Locator calls or any Coyote calls at all ,recorded in Winter however (beyond December 19th) in a period where there were multiple nights of 'Unknown' activity and recordings.
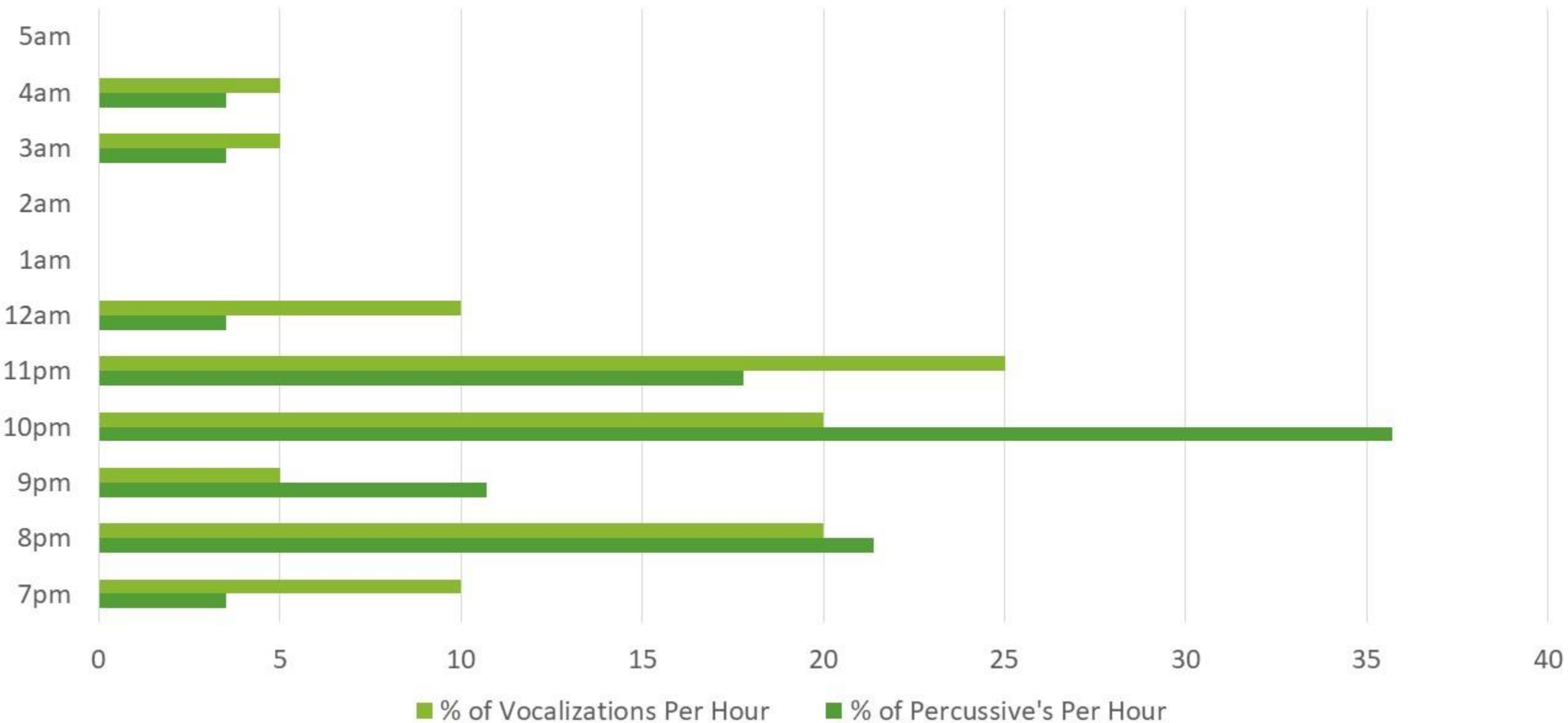
The two consecutive nights of 828 and 829 saw 42.8% of all Coyote Warning/Locator calls alone, as well as the night (828) that saw the most 'Unknown' recordings (9), for Fall/Winter in total.

Unknown Vocalizations and Percussive's – Time of Day

The following pages look at different types of Unknown Vocalizations and Percussive's, and the times of night they were recorded, seasonally.

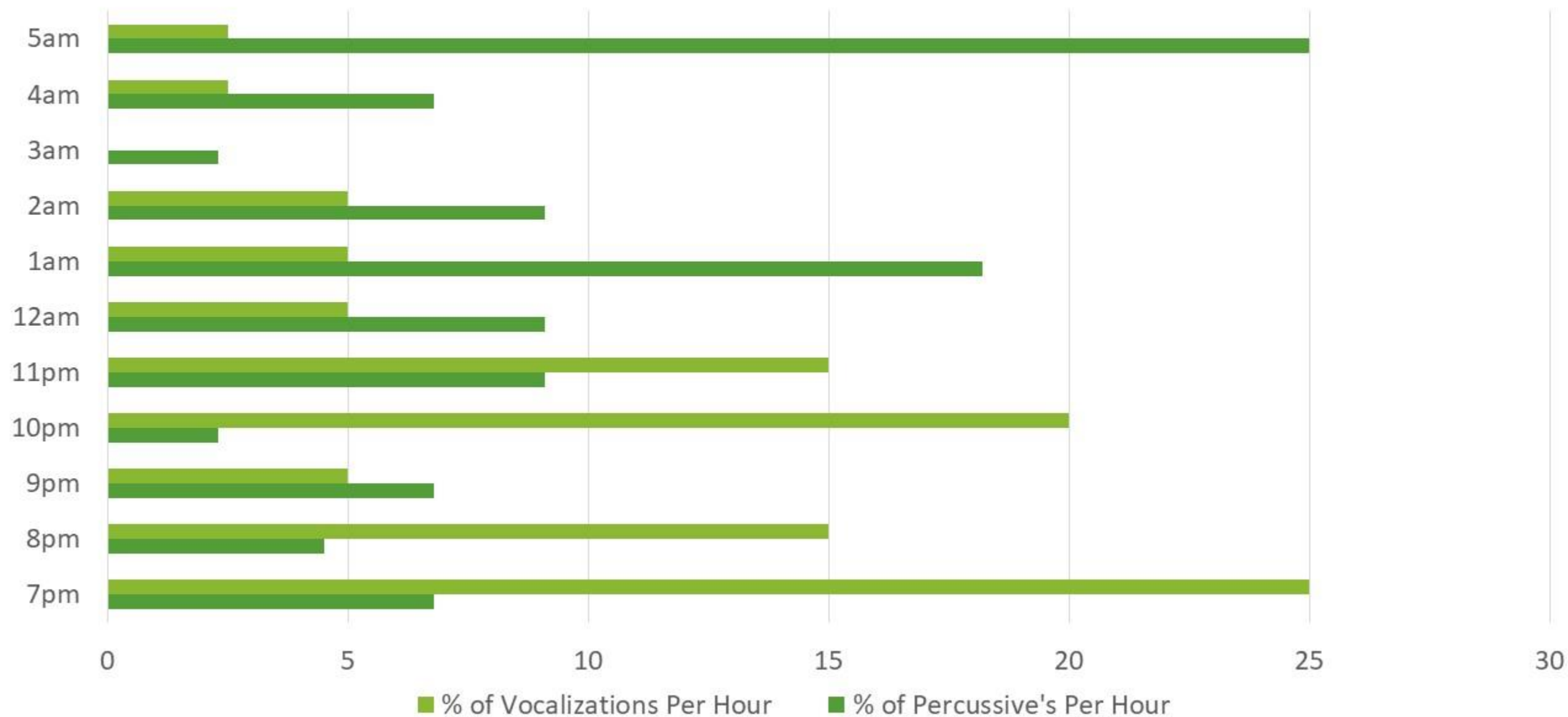Spring – Percussive and Vocalizations Time of Night

Spring Unknown Percussive's and Vocalizations - Time of Day

Spring saw 28 different instances of Percussive's (sometimes multiple in the same minute) spread across 14 nights/mornings, and 21 instances of various Vocalizations spread across 6 different nights/mornings, including Whoops, Screams, Yells, Roars, Howls and Whistles, from 55 nights recorded in total.

92.6% of Percussive's recorded came from before 1am, with 90% of Vocalizations including Whoops, Screams, Yells and Whistles also coming from before 1am.

Summer – Percussive and Vocalizations Time of Night

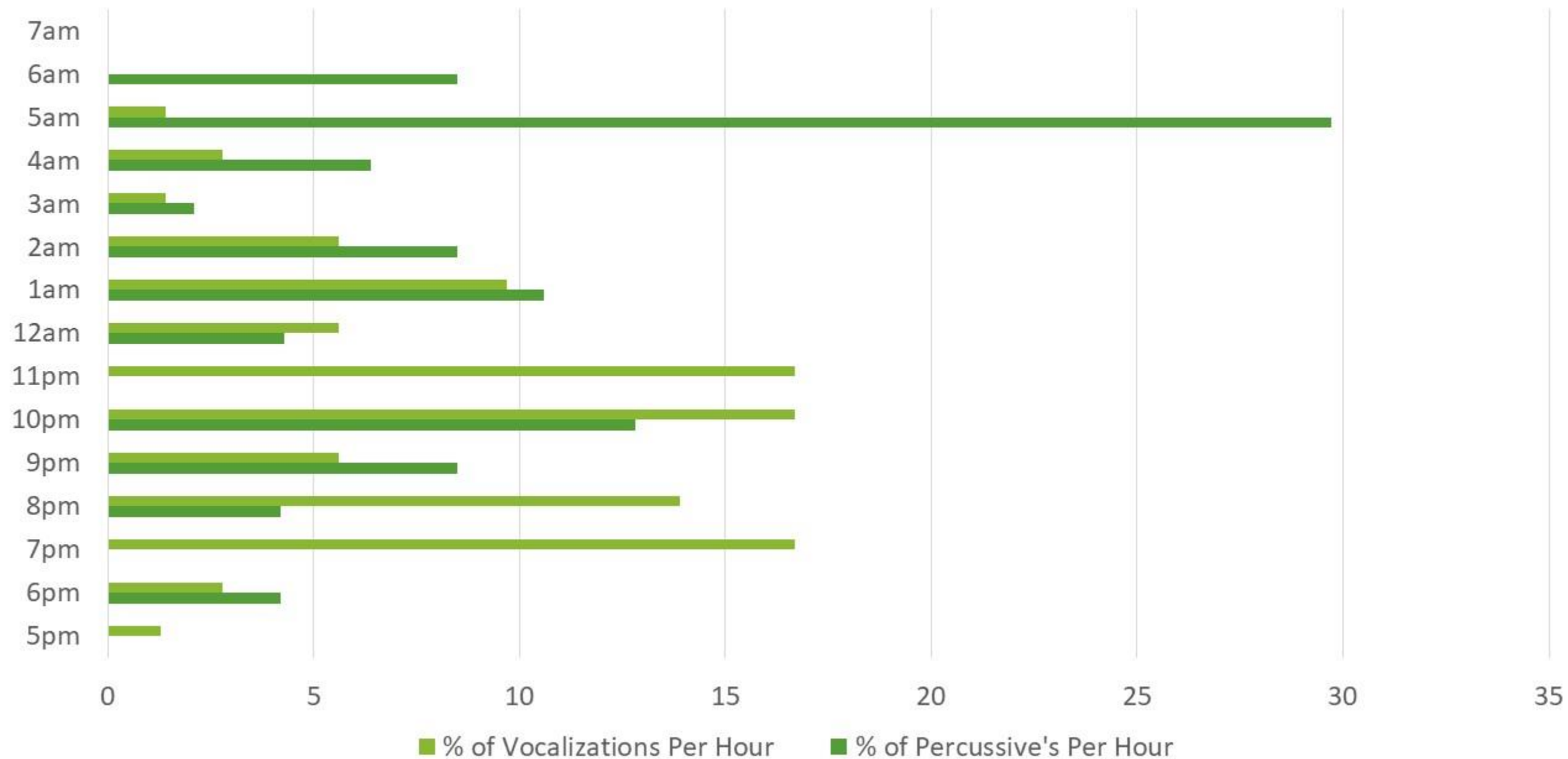% of Vocalizations Per Hour   % of Percussive's Per Hour

Summer Unknown Percussive's and Vocalizations – Time of Day

Summer saw 43 different instances of Percussive's (sometimes multiple in the same minute) spread across 24 different nights/mornings, and 40 instances of various Vocalizations spread across 21 different nights/mornings, including Whoops, Screams, Yells, Roars, Howls and Whistles, from 75 nights recorded in total.

38.6% of Percussive's recorded came from before 1am, with 85% of Vocalizations including Whoops, Screams, Yells and Whistles also coming from before 1am.

Fall/Winter – Percussive and Vocalizations Time of Night

Fall/Winter Percussive's and Unknown Vocalizations – Time of Day

Fall/Winter saw 47 different instances of Percussive's (sometimes multiple in the same minute) spread across 14 different nights/mornings, and 11 instances of various Vocalizations spread across 6 different nights/mornings, including Whoops, Screams, Yells, Roars, Howls and Whistles, from 44 nights recorded in total.

67% of Percussive's recorded came from before 1am, with 79% of Vocalizations including Whoops, Screams, Yells and Whistles also coming from before 1am.

Areas of Focus

- The 000's from 'Unknown Recordings by Date' – Absence of evidence is not evidence of absence, but both 'Unknown' vocalizations and/or Percussive's, were never not recorded in the Nest Area for longer than 7 consecutive nights/mornings, at any stage of 2021, at all.
- Interspecies correlation is strong, and especially so with Coyote. To have 91.5% of 113 Coyote Warning/Locator Calls recorded coming from within 24 hours of 'Unknown' Vocalizations and Percussive's recorded, initially suggests a potentially strong relationship pattern.
- 'Unknown' Vocalizations and Time of Day – 84.7% of all (72) Nights/Mornings of 'Unknown' Vocalizations in the Nest Area came from within the recording period before 1am. More analysis is needed on this and the incorporation of other species (especially Canine) and their 'time of day' Vocalization behaviour will be required.
- 2022 – We strive to record a greater number of nights in 2022 that would be able to yield even more multi-species Wildlife recordings from the Nest Area, and have started incredibly strongly in the first 3 months of the year, with just under 1,000 recordings already logged, from January 1st up to the end of March. We look forward excitedly to what 2022 will bring us all from this truly unique Olympic Peninsula environment.

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Instagram   - [@olympic_project_wa](#)
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