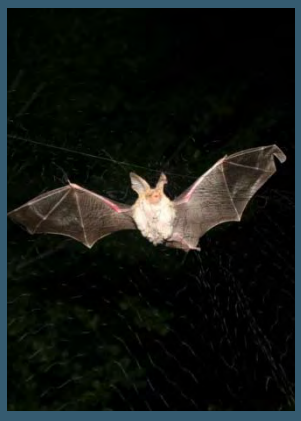

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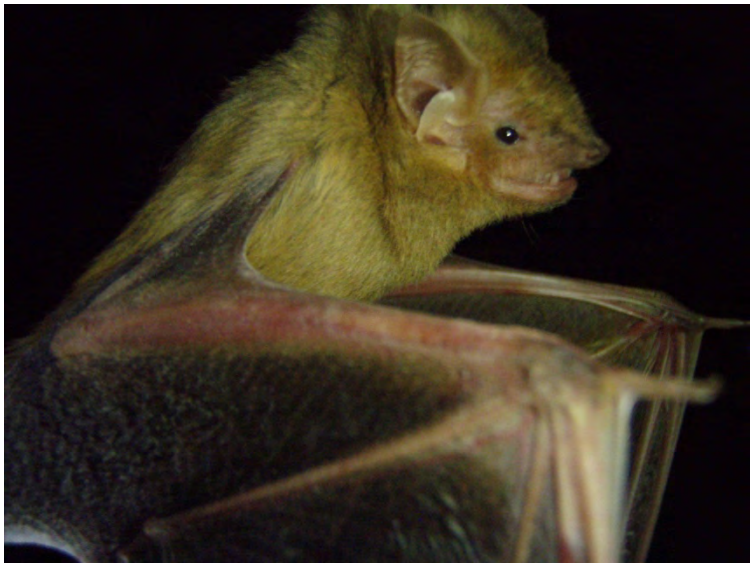

March 2011

SOUTHERN NEVADA WATER AUTHORITY

Las Vegas Wash Coordination Committee

Las Vegas Wash Bat Survey, 2004-2009

SOUTHERN NEVADA WATER AUTHORITY
Las Vegas Wash Project Coordination Team

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ABSTRACT

The Las Vegas Wash Coordination Committee conducted an acoustic and capture monitoring study in order to meet goals from the Las Vegas Wash Comprehensive Adaptive Management Plan. The purpose of the monitoring program was to establish baseline knowledge of bat presence, activity, and habitat use within the Las Vegas Wash (Wash). A total of six years (2004 - 2009) of monitoring was undertaken. There were two components to the study: one was acoustic monitoring (2004 – 2008) and the other was capture monitoring (2008 – 2009). The initial two years of acoustic monitoring data were analyzed by O'Farrell Biological Consulting (OBC); the remaining three years of acoustic data were analyzed by Tetra Tech, Inc. Both years of capture monitoring were conducted and analyzed by the Southern Nevada Water Authority. The results of the capture and acoustic monitoring studies provide useful data on temporal and spatial use of the Wash by bats. There were three acoustic monitoring stations deployed in different habitats available in the study area. Combined, these stations recorded 4,163 detector-nights, containing 1,670,979 minutes of bat activity. The acoustic study documented a total of 18 species. Eight of the species are protected by the state of Nevada. The capture study consisted of four site locations. This portion of the study documented the species type, sex, reproductive status, weight, and body measurements of the bats using the Wash. Throughout the study a total of 47 trap nights were conducted and 195 bats were caught and identified. Eight species were captured, all of which were previously detected through acoustic monitoring. The Wash' six year monitoring effort has provided a well rounded and rigorous assessment of bat activity rates and species occurrence patterns. It is apparent that bats are consistently using the Wash resources and not just migrating through the area.

ACKNOWLEDGEMENTS

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Las Vegas Bat Survey, 2004-2009

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1.0 INTRODUCTION

The Las Vegas Wash (Wash) is the primary drainage channel for the Las Vegas Valley, discharging urban flows to Lake Mead, the valley's primary drinking water source. Beginning in the 1970s, erosion began scouring the channel's banks, draining its wetlands, and carrying large amounts of sediment to the lake. In 1998, the Las Vegas Wash Coordination Committee (LVWCC) was formed to develop and implement a long-term management plan to stabilize and enhance the channel. Thus, in 2000 the LVWCC developed the Las Vegas Wash Comprehensive Adaptive Management Plan. This plan outlines 44 action items for the long-term management of Wash resources, including the goal of developing a long-term fish and wildlife management plan. As the lead agency, the Southern Nevada Water Authority (SNWA), instituted a variety of wildlife studies, including this bat monitoring program, to support the development of the Las Vegas Wash Wildlife Management Plan.

Until recently, little was known about the bat populations associated with the Wash. Dr. Michael J. O'Farrell initiated the first mist net studies in the southern Nevada area in 1964 (O'Farrell and Shanahan 2006). Mist nets and harp traps were used, but they were limited techniques because they sampled an extremely small area used by free-flying bats (O'Farrell and Gannon 1999). In the past decade, technological advances have produced acoustic equipment to record and display echolocation calls so the vocalizing bat species can be identified (O'Farrell and Shanahan 2006). Although acoustic units are good for long term studies, they have limitations. For example, quiet species are difficult to detect (O'Farrell and Gannon 1999). By implementing both acoustic and capture techniques, data are more comprehensive. Acoustic monitoring allows data to be collected consistently every night, and other capture methods can help to identify the bats that otherwise may go undetected. Furthermore, capture techniques provide demographic data, which cannot be collected from acoustic studies.

The purpose of this study was to determine bat species diversity and abundance composition along the Wash. Baseline data were collected during extensive restoration initiatives, which allowed for effects of the program to be documented. This report summarizes comprehensive acoustic and capture surveys in the Wash from 2004 through 2009.

2.0 MATERIALS AND METHODS

2.1 Acoustic Monitoring Sites

Three acoustic monitoring stations were established in different areas to reflect the different habitats of the Wash (Figure 1): Upstream, Midstream, and Downstream. Upstream Station was located in a narrow portion of the Wash where the active channel is four meters below the historic floodplain. The station was on the water's edge and was bordered on the south by a low, small bank vegetated with salt cedar (*Tamarix ramosissima*) and quailbush (*Atriplex lentiformis* ssp. *lentiformis*) and on the north by a high wall with dense salt cedar on top. Midstream Station was placed in a back channel upstream of the Historic Lateral Weir. The station was surrounded by marsh habitat including common reed (*Phragmites australis*), cattails (*Typha domingensis*), and salt cedar. Downstream Station was located next to the Wash and faced a broad open channel with open water and a sandbar vegetated with common

reed and cattails. This station was surrounded by quailbush and salt cedar. All microphones were oriented toward the Wash channel to record all bats using the Wash as a flight path.

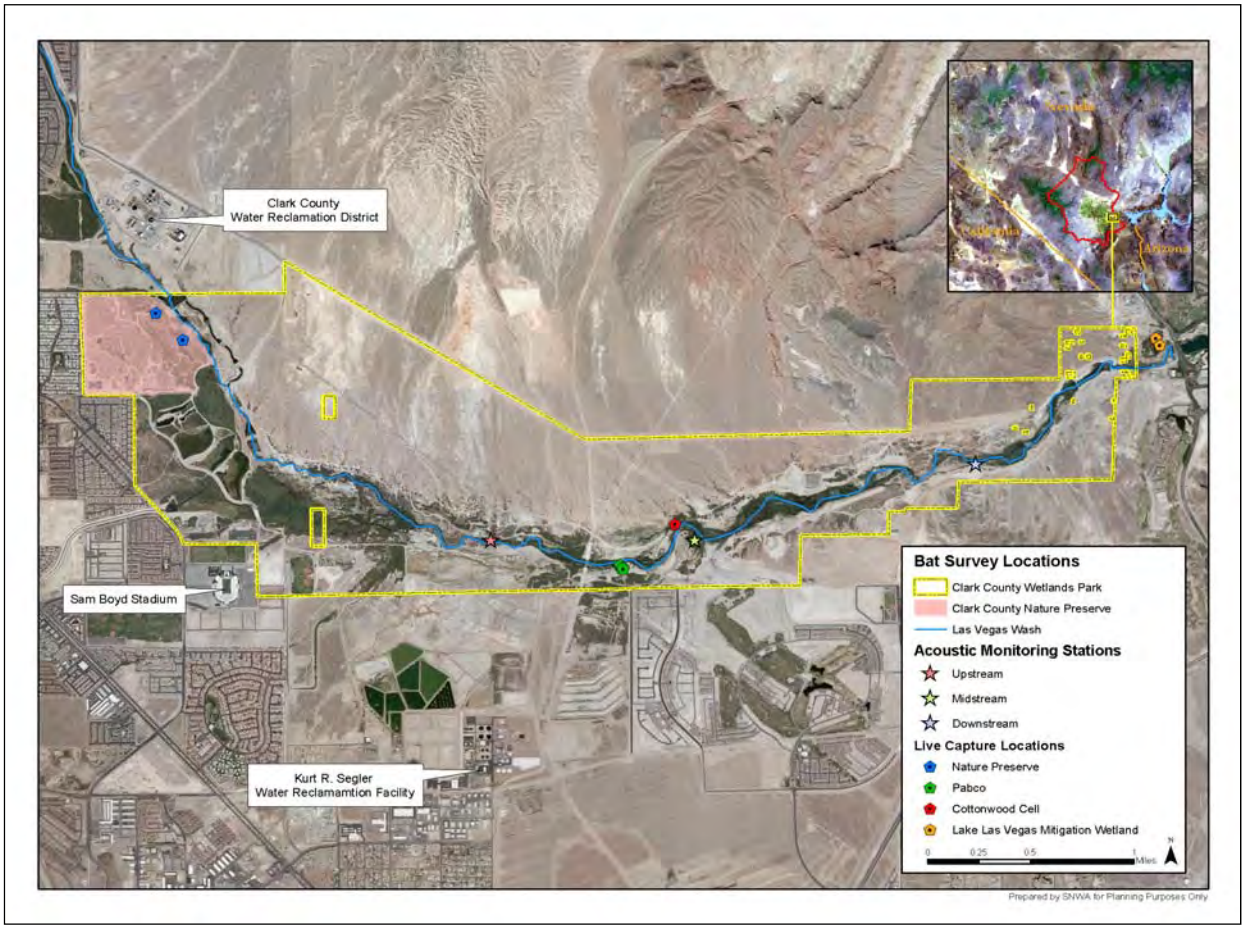

Figure 1. Bat study locations at the Las Vegas Wash, Clark County, NV.

2.2 Acoustic Monitoring Equipment

The structure of each acoustic unit consisted of a three meters tall, square metal post, with a portion buried and concreted in place. A round pole was fitted inside the square post with PVC pipe spacers. Microphones and reflector plates were attached to the top of the pole, and the solar panel was attached on the side of the pole. Microphone and the solar panel wires were zip-tied to the post and led into a weather proof National Electrical Manufacturers Association case, which held the remaining equipment, including a rechargeable battery, a solar charge controller, a Compact Flash Zero Crossing Analysis Interface Module (CF ZCAIM), and an Anabat II bat detector (Titley Electronics, New South Whales, Australia; Appendix A). Later in the survey, new equipment was purchased to replace stolen units. Because the CF ZCAIM and Anabat II were no longer being manufactured, they were replaced with a new unit that combined the CF ZCAIM and Anabat II into one, called the Anabat SD1. The units were programmed to start recording an hour before dusk and to stop recording an hour after dawn to ensure that the majority of bat activity was being recorded. Each CF ZCAIM had an Secure Digital card inside to store the large amount of data, downloaded every two weeks.

All stations were launched on January 7, 2004, and operated through February 27, 2009. Due to technical errors and vandalism, the stations did not collect data continuously over the study period. Multiple actions were taken to resolve the problems so the stations could return to proper working order.

2.3 Acoustic Monitoring Data Analysis

Potential bat call files were extracted from data files using CFCread software, which screens all data recorded by the bat detector and extracts call files using program filters. To ensure comparability between data collected during each period, the default settings for the CFCread software were used during the file extraction process. These settings include a maximum time between calls of five seconds, a minimum line length of five milliseconds, and a smoothing factor of 50. The smoothing factor determines whether adjacent pixels can be connected with a smooth line. The higher the smoothing factor, the less restrictive the filter, resulting in more noise files and poor quality call sequences retained within the data set. A call is defined as a single pulse of sound produced by a bat; a call sequence is defined as a combination of two or more pulses recorded in a single call file.

A qualitative visual comparison was made of recorded bat call sequences of sufficient length to established reference libraries of bat calls, a technique that yields relatively accurate identification of bat species (O'Farrell 1997, O'Farrell et al. 1999, O'Farrell and Gannon 1999). All call sequences were also run through a series of conservative filters based on call sequence characteristics outlined in Szweczak et al. (2008) and from known species call sequences (hand-released and zip-line individuals) from a regional call library. A call sequence was considered of suitable quality and duration to be included in data analysis if the individual call pulse(s) exhibited the full spectrum of frequency modulation produced by a bat (i.e., consisting of sharp, distinct lines) with a minimum of three pulses (Appendix D).

An Index of Activity (IA) was calculated to determine relative activity levels of recorded bats across detector stations and between years (Miller 2001) and to allow comparisons between sampling periods with different levels of effort. Index of Activity values were based on the amount of time call sequences were present within the dataset compared to the total amount of time the detectors were operational. Therefore, IA was the sum of the duration of recordings with a species present divided by the unit effort (IA = # minutes/detector-nights*100).

Acoustic data from 2004–2006 were previously analyzed by Dr. Michael J. O'Farrel; data from 2006–2008 were analyzed by Tetra Tech, Inc. The data analysis techniques that Tetra Tech used were largely consistent with O'Farrell and Shanahan (2006). O'Farrell and Shanahan (2006) conducted MANOVA tests, but this analysis technique was determined to be inappropriate for the five year data set because the data were not normally distributed. Non-parametric tests analogous to those employed by O'Farrell and Shanahan (2006) were employed because the data did not meet the assumptions for parametric analysis (Zar 1996). Kruskall-Wallis Tests, and post-hoc Mann-Whitney U Tests where applicable, were conducted to explore: (1) the effect of time in years (2004–2008) on IA for each of the three habitats, (2) the effect of habitat on species IA, and (3) the effect of habitat on the overall IA. A Spearman's Rank Order test was performed to determine any potential relationship between IA

by detector and species richness among years. All statistical analyses used SPSS (version 11.5).

Weather data was collected at each of the three detector stations by Hobo Pro Series Data Loggers (Onset Inc. Bourne, Massachusetts). Loggers collected temperature and relative humidity data, which were then summarized to provide seasonal weather parameters useful for making comparisons to the bat acoustic data collected concurrently.

2.4 Capture Monitoring Sites

Capture sites were located in the Clark County Wetlands Park (CCWP) and in the Lake Las Vegas Mitigation Wetland (LLVMW). The three sites located in CCWP were Nature Preserve (NP), Downstream Pabco South (Pabco), and Cottonwood Cell (CC). The fourth capture site was located in LLVMW and was named for its location. These capture sites were chosen because they had distinctive vegetation flight paths and/or open, slow moving bodies of water lined with vegetation. Vegetation flight paths are wide paths surrounded by mature stands of vegetation such as cottonwood trees. All monitored flight paths had vegetation canopies 10–12 meters high.

Nature Preserve is a restored habitat regularly maintained to prevent vegetation from over-growing the walking paths. This site had nets set in three different habitat types throughout the two year study. During the first year, a double-high net (two nets stacked on top of each other) was placed over the eastern arm of the upper pond. This sight was nearly nine meters wide, and the waters' edges were lined with reeds. A triple-high net (three nets stacked on top of each other) was placed in a cottonwood (*Populus fremontii*) grove in the north-east portion of the preserve. This area had mature cottonwood trees with reeds surrounding the area. During the second year, the upper pond and cottonwood grove could not be sampled because too much vegetation was cleared from both areas. The triple-high net was moved to a salt cedar corridor in the southern part of the preserve, but another water location was not established.

Pabco and CC are both areas that have been revegetated with native plant species. These sites have occasional maintenance to remove invasive weeds and trash but are not pruned for aesthetic purposes. Cottonwood Cell differs from Pabco because the branches of cottonwood trees are harvested and planted in other areas of the Wash.

In 2008, Pabco had one triple-high net set in a nine meter flight corridor with cottonwood trees lining both sides and two harp traps set between two cottonwood trees. In 2009 the triple-high net was the only capture technique used. Harp traps were not used because the area previously utilized was blocked by large broken branches that were still partially attached to the trees. The vegetation had also grown in and blocked the harp trap sites.

Cottonwood Cell had one triple-high net set in various spots due to changes in vegetation. The pole harvesting had no impact on the flight path, but animal activity dramatically changed the site. In August of 2008, a beaver had removed approximately 15 mature cottonwood trees in one area, leaving a large gap in the cell and changing the flight path. The trees planted at CC are planted in close proximity, causing frequent vegetation changes. In 2009, the triple-high net had to constantly be moved to keep it in a flight path.

The LLVMW, the only site not located in the CCWP, is found along the Wash. The walking paths on this site were used by guests and residents of Lake Las Vegas, so it was regularly maintained to keep the paths clear. One triple-high net was set over a walking trail in the middle of the recreation area in a nine meter flight path lined on both sides by mature Goodding's willow trees (*Salix gooddingii*). In addition, two harp traps were set side by side over a walking trail on the east side of LLVMW between mature Goodding's willow trees, blocking the entire flight path. In 2009, the harp traps were not used because the vegetation was cleared from one side of the path, eliminating the flight path on the east side of the LLVMW.

2.5 Capture Monitoring Equipment

Polyester mist nets were used with mesh size 38mm, height 2.6 meters, and lengths varying from 6, 9, or 12 meters. These nets were stretched between two metal poles secured to the ground with ropes. Double-panel harp traps fitted with plastic lined canvas bags were also used (Appendix A). Harp traps were placed in narrow corridors surrounded with vegetation. Single mist nets were used in different patterns, such as a z-formation, in an attempt to distract the bats with one net and catch them in another. Mist nets were also stacked on top of each other, referred to as double- or triple-high nets (Appendix A) to catch high-flying species. Once captured, the bats were removed from the nets and traps and placed into cloth bags before processing. Each specimen was weighed and measured for length of forearm, tragus, ear, and hind foot. Additional data, including reproductive status, relative age, and sex of each animal was recorded onto standard data sheets, and the bats were subsequently released. When available, acoustic units were used to record the echolocation call of the hand-released bat to aid in species identification.

3.0 ACOUSTIC MONITORING RESULTS

3.1 Level of Effort

Detectors operated for 4,173 detector-nights (number of nights of operation per detector), during which each of the three detectors operated generally well. On average detectors recorded data for 278 nights per year (Table 1). The most successful year, in terms of total number of nights recorded, was 2005 when 1,012 detector nights were recorded. Level of effort varied between years, with the lowest number of nights recorded in 2006 (n = 644).

During the entire sampling period, 579,644 call files were recorded, resulting in more than one-million minutes of bat activity (n = 1,667,218). The Index of Activity for the entire study period for all detector stations was 39,953 (minutes of activity/detector-nights*100; Table 1).

Sporadic data gaps occurred during the five year study due to vandalism, technical problems, and loud insect noise that cluttered the identification of bat calls (Appendix E). Regular monitoring helped relieve controllable issues. Visiting the sites on a regular basis allowed data to be downloaded and the equipment was confirmed to be working properly. Monitoring also helped prevent vegetation growth from interfering with the study. By keeping the vegetation trimmed, insect noise was decreased greatly.

Detector	Year	# Files	# Call Pulses	# Detector -nights	# Minutes of activity	Index of Activity Total	Species Richness
Upstream	2004	73,516	1,459,709	295	44,456	15,070	15
	2005	34,560	350,516	339	25,942	7,652	14
	2006	92,483	7,794,983	186	364,251	195,834	8
	2007	34,290	4,006,113	260	250,773	96,451	8
	2008	26,620	5,415,850	333	339,020	101,808	9
Midstream	2004	27,917	317,413	307	19,973	6,506	13
	2005	10,482	49,303	314	8,601	2,739	13
	2006	21,657	296,997	225	14,659	70,497	11
	2007	27,806	244,838	258	18,230	7,066	12
	2008	11,131	1,310,942	253	82,062	32,436	17
Downstream	2004	39,847	479,636	361	31,033	8,596	14
	2005	26,931	255,195	359	22,579	6,289	12
	2006	40,787	497,566	233	31,358	13,458	12
	2007	32,582	392,952	130	18,365	14,127	10
	2008	79,035	6,338,105	320	395,916	123,724	14
Total		579,644	29,210,118	4,173	1,677,218	39,953	18

Table 1. Acoustic monitoring data (activity and richness) at the Las Vegas Wash from 2004 to 2008.

3.2 Species Abundance and Diversity

From January 2004 through December 2008, 18 species were recorded and identified in the Wash. Eight bats are protected by the state of Nevada NAC 503.030; three are listed as state protected; four are listed as state protected-sensitive; and one is listed as state protected-threatened (Table 2). Species richness varied annually and by site, and no single site documented all 18 species.

During all study years, at least eight species were present per station. On average, 12 bat species were present in the Wash across years (Table 1). Three species, Pallid bat (*Antrozous pallidus*), Big brown bat (*Eptesicus fuscus*), and Brazilian free-tailed bat (*Tadarida brasiliensis*), were documented at all three detectors during each year of the study (Table 3). Midstream Station demonstrated the greatest species richness (17 species in 2008), lacking only *Euderma maculatum* (Tables 3). Upstream and Downstream stations had equal overall species richness, (n = 16).

The lowest species richness was observed in 2006, 2007, and 2008 at Upstream Station. Overall, study years 2006 and 2007 across all stations yielded the lowest species richness (Table 3). Species richness was at its peak in 2008, with 17 species documented at Midstream Station. Total number of species present was highest during the summer months and lowest during the late fall, winter, and early spring (Figure 2). The results of a Spearman's rank order test for detector IA and species richness yielded no significant relationship among detector stations across all years.

Family	Scientific Name	Common Name	Species Code	Acoustic Identification	Capture Identification	State Protected
Phyllostomidae	*Macrotus californicus*	California leaf-nosed bat	MACA	X		p-s
Vespertilionidae	*Myotis californicus*	California myotis	MYCA	X	X	
Vespertilionidae	*Myotis ciliolabrum*	Western small-footed myotis	MYCI	X	X	
Vespertilionidae	*Myotis thysanodes*	Fringed myotis	MYTH	X		
Vespertilionidae	*Myotis yumanensis*	Yuma myotis	MYYU	X	X	
Vespertilionidae	*Lasionycteris noctivagans*	Silver-haired bat	LANO	X		
Vespertilionidae	*Lasiurus blossevillii*	Western red bat	LABL	X		p-s
Vespertilionidae	*Lasiurus cinereus*	Hoary bat	LACI	X		
Vespertilionidae	*Lasiurus xanthinus*	Western yellow bat	LAXA	X	X	
Vespertilionidae	*Parastrellus hesperus*	Canyon bat	PAHE	X	X	
Vespertilionidae	*Eptesicus fuscus*	Big brown bat	EPFU	X		
Vespertilionidae	*Euderma maculatum*	Spotted bat	EUMA	X		p-t
Vespertilionidae	*Corynorhinos townsendii townsendii*	Townsend's big-eared bat	COTO	X	X	p-s
Vespertilionidae	*Idionycteris phyllotis*	Allen's big-eared bat	IDPH	X		p
Vespertilionidae	*Antrozous pallidus*	Pallid bat	ANPA	X	X	p
Molossidae	*Nyctinomops macrotis*	Big free-tailed bat	NYMA	X		
Molassidae	*Eumops perotis californicus*	Greater western mastiff bat	EUPE	X		p-s
Molassidae	*Tadarida brasiliensis*	Brazilian free-tailed bat	TABR	X	X	p

State protected species (NAC 503.030); p = state protected p-s = state protected - sensitive p-t = state protected – threatened

Table 2. Eighteen species detected using acoustic and capture techniques at the Las Vegas Wash from 2004 to 2009.

Scientific Code	Upstream - Index Activity					Midstream - Index Activity					Downstream - Index Activity					Overall IA
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	
ANPA	130.8	27.4	130.9	19.7	7.1	226.7	130.3	32.9	65.9	27.3	25.5	17.3	17.2	15.4	4294.9	387.6
COTO	6.8	1.5	0	0.3	0	24.8	7	4.9	19.8	77.3	8	1.7	4.7	0.8	4.8	10.6
EPFU	1689.5	357.7	10,061.2	4151.5	4508.7	77.9	20.1	7.1	7	20,830.80	77	28.7	2.6	8.5	36,355.9	5283.8
EUMA	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02
EUPE	0.3	0.3	0	0.4	0	0.3	1	0	0	20.6	3.6	5.3	2.6	0	13.9	3.37
IDPH	0	0	0.5	15,257.9	0	0.3	0	0	0	10	0	0	0	0	0	951.30
LABL	5.1	7.7	0	0	0	2.3	1	0.9	15.9	28.5	10.5	1.1	0.4	48.5	1.3	6.62
LACI	58.3	23.6	74,336.6	0	12,809.7	1.3	2.9	1.8	34.9	887.6	90	25.1	103	16.9	118	4,423.23
LAXA	1979	828	44.5	0	0	327	23.6	0	679.5	209.8	672	31.8	267	660	279.5	436.94
LANO	0	0	0	0	0	0	0	546.7	0	235.3	0	0	0	0	60.3	18.91
MACA	0	0	0	0	0	0	0	0	0	1.2	3.2	0	0	0	0	0.10
MYCA	2121	604.1	0	0	3877	2145.90	959.9	1507.60	2223.30	1430	1165.9	635.7	1038.6	1113.1	7493.2	1,866.76
MYCI	5.1	3.5	0	0	0	5.5	2.2	7.1	7.8	0.3	1.4	0.8	0.4	24.6	0	2.32
MYTH	0.3	0	28.6	233.3	15.8	0	1.9	0	0.4	301.7	0.3	0	0	0	10.3	37.15
MYYU	2453.9	1502.5	0	0	1215.7	1,595.10	801.9	2545.30	2201.20	718.9	0	0	0	0	262.9	1,560.70
NYMA	0.3	128.5	103,541.8	61,993.5	69,185	0	0	0	0	1052.6	1.1	2.8	1.3	0	1312.1	14,173.79
PAHE	1212.5	706.3	0	0	581	1605.90	409.9	1023.10	1060.50	1063.4	2404.2	1299.2	3090.6	4262.3	52,618.2	5,183.68
TABR	5406.8	3461.1	7690	14,794.8	9608	492.8	378.7	837.8	750	5540.5	2266.2	2679.9	4023.6	5298.5	20,898.4	5,605.73

Table 3. Index of Activity for 18 species detected at the acoustic monitoring stations at the Las Vegas Wash from 2004 to 2008.

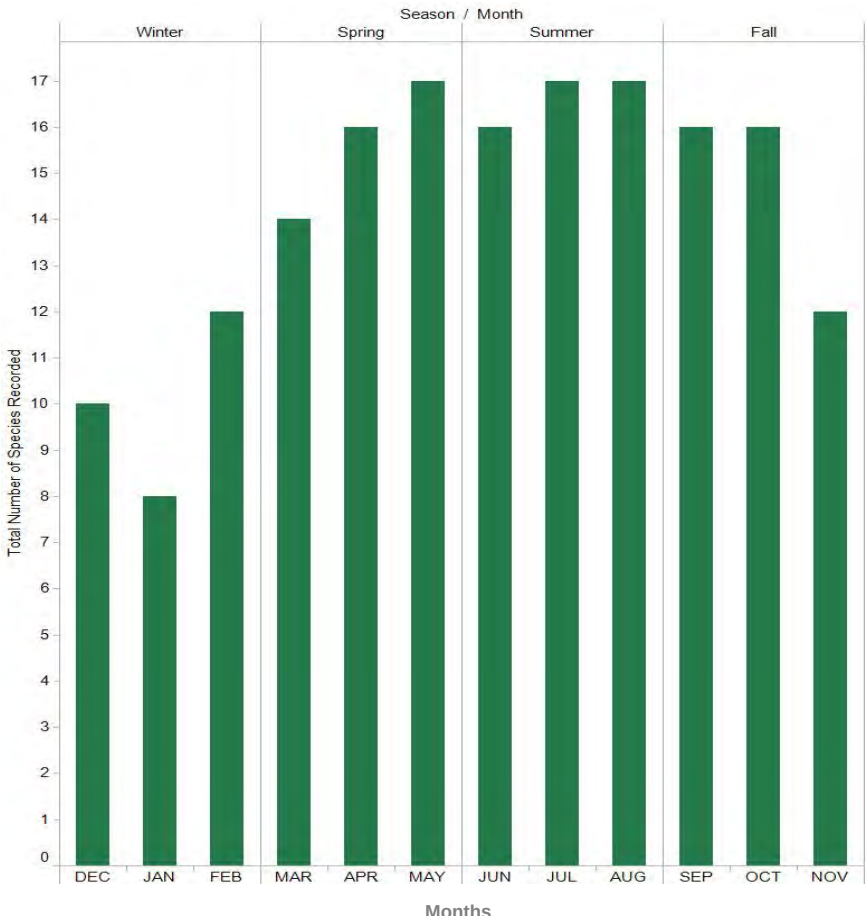

Figure 2. Species richness by month: all detectors and years pooled for five year study period from January 2004 to December 2008.

3.3 Temporal and Spatial Distribution of Activity by Detector

Overall activity rates during the study period were lowest in December, January, and February, but began to increase in March, April, and May. In the fall, activity began to decrease substantially after October, with the exception of Midstream Station, where rates increased from September through November across all years. This fall activity spike at Midstream Station was likely due to an unusually high degree of *T. brasiliensis* and *Nyctinomops macrotis* activity in fall 2008.

Index of Activity values were calculated for each species by month for all detector stations and years pooled (Appendix B). These values demonstrated the seasonal and monthly variability in activity at the Wash during the entire study period and at all detector stations. Overall, the highest IA values were recorded during the summer months; however, peak IA values were more variable for individual species. Thirteen of the 18 recorded species had peak IA values during the summer months (June, July, and August; Appendix B). Four species (*Lasiurus blossevillii*, *Lasionycteris noctivagans*, *Myotis californicus*, and *Myotis yumanensis*) had peak IA values in fall months (September, October, and November; Appendix B). One species, *Macrotis californicus*, had peak IA value during the spring months (March, April, May; Appendix B).

At the Upstream Station, the highest IA levels for all species and years pooled were recorded during the summer months, with peak IA occurring in July, followed by August (Figure 3). Trends in monthly IA values at Midstream Station (Figure 4) were noticeably different from those recorded at the Upstream Station. The peak IA value for all species and years pooled at Midstream Station was in July, followed by August. In contrast to Upstream Station the highest IA rates were recorded only during the summer months, but high levels of activity continued to be recorded at Midstream Station through the fall. At Midstream Station, the third highest IA value was recorded in November for all species and years pooled (Figure 4). Downstream Station activity patterns resembled those of Upstream Station in temporal distribution. The peak IA value for all species and years pooled at Downstream Station occurred in July (Figure 5). In general, the IA trends per month for all species and years pooled at each station resembled the trends document by each of the most frequently recorded species during the study period, with peak IA values recorded during the summer months (Appendix B, B-1 to B-3).

Upstream Station recorded the greatest IA in 2006 and the lowest IA in 2005 (Table 1). Similar trends were observed in IA rates between years at Midstream Station. The highest IA rates at Downstream Station were recorded in 2008. Index of Activity rates were lowest at all stations in 2005 (Table 1). Overall, each year's activity varied substantially between months. Recordings in June, July, and August yielded the highest IA rates at both Upstream and Downstream stations (Figure 3 and 5). This trend was exhibited by Midstream Station, which also exhibited the highest IA rates in July and August (Figure 4).

The most active species (as indicated by IA) during the entire study period were *N. macrotis*, *T. brasiliensis*, *Eptesicus fuscus*, *Parastrellus hesperus*, *Lasiurus cinereus*, and *Myotis californicus* (Table 3). At all detector stations pooled, these six species accounted for 91.5%. *Nyctinomops macrotis* accounted for 35.5% of activity, as indicated by IA, (the majority of *N. macrotis* activity was at Upstream Station in 2006, 2007, and 2008; Appendix B, B-1). *Tadarida brasiliensis*, *E. fuscus*, and *P. hesperus* accounted for 14, 13.2, and 13% of activity, respectively, across all years and all detector stations pooled. *Lasiurus cinereus* accounted for 11.1% of activity across all years and all detector stations pooled. Other species with substantial activity rates were *Myotis californicus*, 4.7%; *Myotis yumanensis*, 3.9%; and *Idionycteris phyllotis*, 2.4%. The remaining ten species (individual species IA pooled) accounted for 2.3% of all activity.

At Upstream Station, *T. brasiliensis* was the most active species during 2004 and 2005. In 2006 through 2008, *N. macrotis* became the most active species at Upstream Station. Its calls were present at very low levels in the dataset in 2004 and 2005 and increased substantially in 2006, 2007, and 2008. Activity of *P. hesperus* at Upstream Station was highest in 2004 and 2005, with a sharp decline in 2006 and 2007, and an increase in 2008. *Lasiurus cinereus* activity was highest in 2006 and 2008 and was relatively low in 2004, 2005, and 2007(Appendix B, B-1). Less commonly recorded species, such as *Corynorhinus townsendii* and *I. phyllotis*, were present at low levels in only a few years. *Idionycteris phyllotis* was documented only at low levels except for 2007, when species IA peaked at greater than 15,000.

At Midstream Station, the most consistently active species were *Myotis californicus* and *Myotis yumanensis*. *Myotis yumanensis* was recorded during each year of the study period, with IA values between 718.9 and 2,545.3. Similarly, *Myotis californicus* was recorded each year with

yearly IA rates of between 959.9 and 2,223.3 (Table 3). *Parastrellus hesperus* was also recorded each year at Midstream Station; IA values ranged from 409.9 in 2005 to 1,605.9 in 2004. *Eptesicus fuscus* IA rates were below 78 during the first four years of the study but increased substantially in 2008 to 20,830.8. *Tadarida brasiliensis* activity rates were moderate throughout 2004 and 2005 but increased slightly in 2006 and 2007 and increased substantially in 2008. *Nyctinomops macrotis* activity was not documented at Midstream Station in 2004 through 2007 but appeared in 2008 with an IA rate of similar magnitude to *P. hesperus*.

Downstream Station recorded IA rates of *P. hesperus* and *T. brasiliensis* of greater than 1,000 in all years (Appendix B, B-3). *Myotis californicus* exhibited moderate levels of activity throughout the study period, with IA rates ranging from 635.7 to 7,493.2. *Lasiurus xanthinus* was recorded frequently in 2004 and 2007 but was less active in 2005, 2006 and 2008. *Antrozous pallidus* exhibited consistently low levels of activity, with IA values between 15.4 and 25.5 until 2008 when IA increased to 4,294.9 (Table 3). As with the Midstream Station, Downstream Station did not document substantial *N. macrotis* activity until late in the study period.

Differences in activity rates were observed between detectors and within years. When comparing all stations in 2004, Upstream Station recorded the least number of detector-nights but recorded the highest level of activity. In 2005, Upstream Station recorded the highest activity rates, despite recording for fewer detector-nights than Downstream Station. In 2006 and 2007, Upstream Station recorded substantially higher activity rates than the other stations, as measured by IA, but operated for fewer detector-nights than Midstream and Downstream stations (Figures 6–10). In 2008, the highest IA rate was recorded at Downstream Station, which operated for fewer detector-nights than Upstream Station (Table 1).

No differences among years were found for pooled IA on Upstream Station (df = 4, $p = 0.794$) or Midstream Station (df = 4, $p = 0.095$) but differed significantly among years for Downstream Station (df = 4, $p = 0.007$). The IA for 2008 was significantly different when compared to all years, 2004–2006 ($p < 0.05$). To explore differences among habitats, the IA data for all years were pooled for each habitat, but no significant differences were found (df = 2, $p = 0.073$). Within the Downstream Station data there were significant differences (post-hoc Mann-Whitney U Tests) between the overall IA in 2008 and the overall IA in 2005 ($P = 0.003$, DF = 4), 2006 ($P = 0.004$, DF = 4), and 2007 ($P = 0.003$, DF = 4), with the IA in 2008 being significantly greater than in other years. Between-year differences within the Upstream and Midstream locations were not significant. Assessment of IA for each species by detector station indicated that most species ($n = 15$) did not prefer any one station significantly more than another. Three species (*I. phyllotis*, *Lasiurus cinereus*, and *N. macrotis*) preferred Upstream Station significantly more than the other three stations ($p < 0.05$).

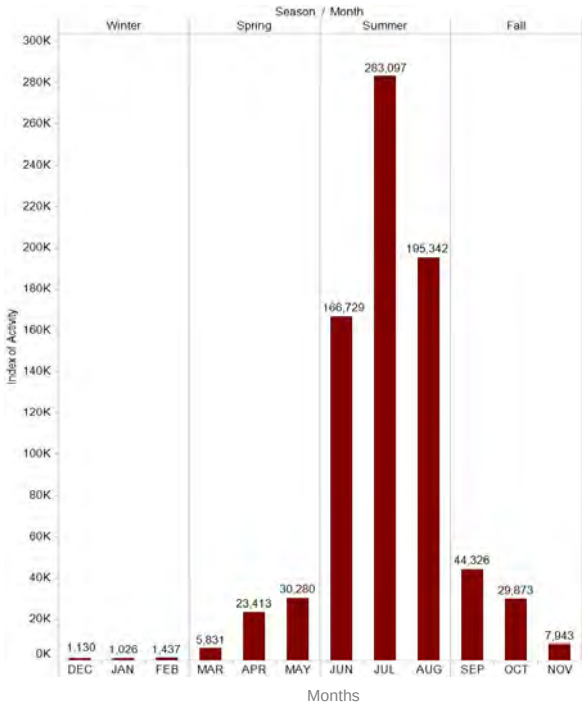

Figure 3. Monthly Index of Activity at Upstream Station from 2004 to 2008.

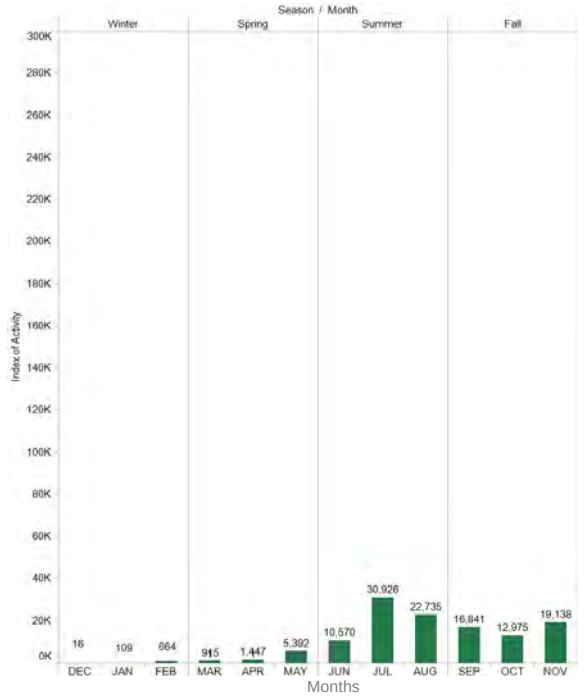

Figure 4. Monthly Index of Activity at Midstream Station from 2004 to 2008.

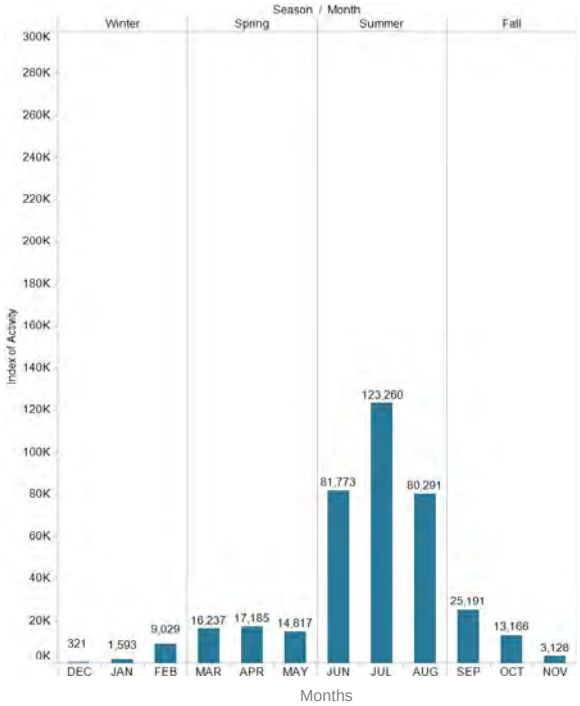

Figure 5. Monthly Index of Activity at Downstream Station from 2004 to 2008.

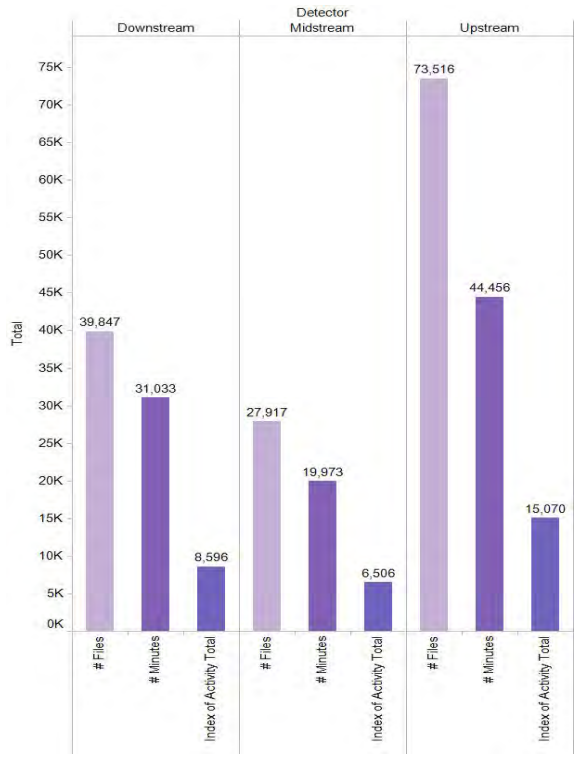

Figure 6. Activity and level of study effort by detectors in 2004.

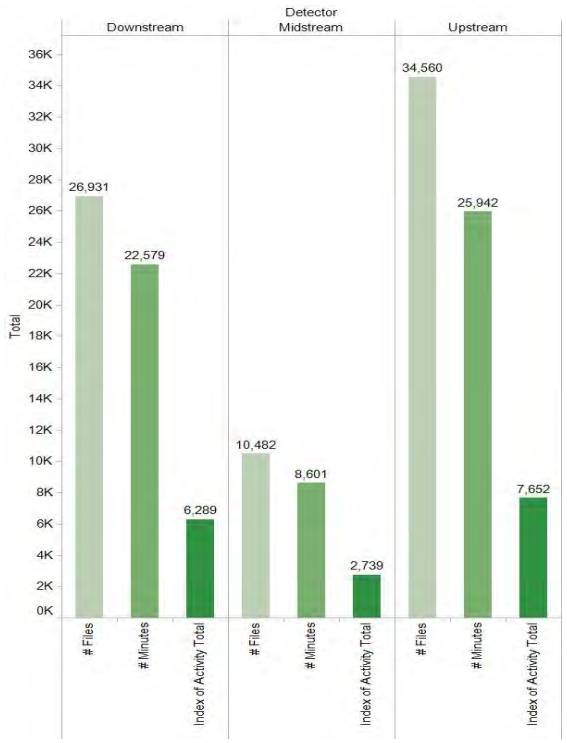

Figure 7. Activity and level of study effort by detectors in 2005.

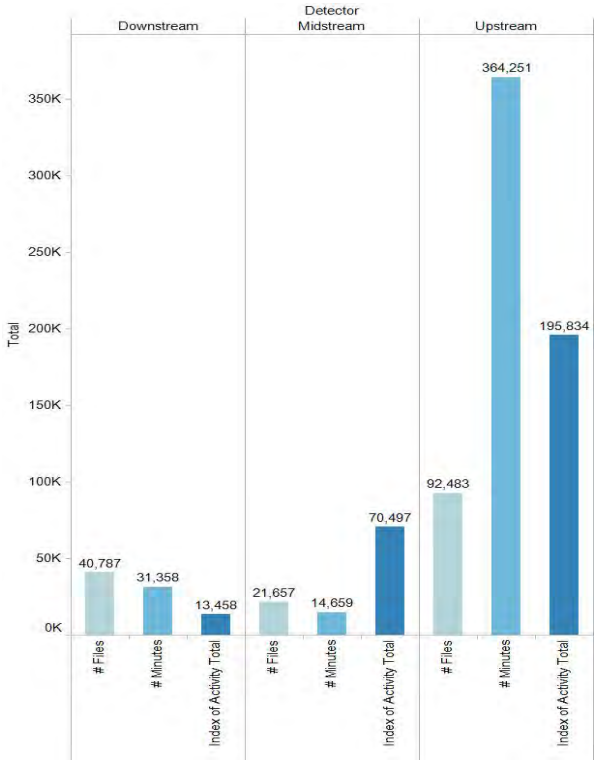

Figure 8. Activity and level of study effort by detectors in 2006.

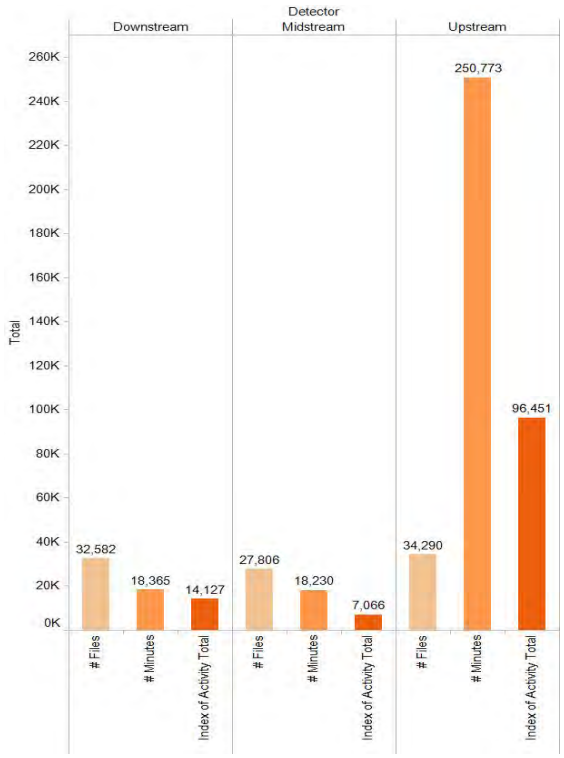

Figure 9. Activity and level of study effort by detectors in 2007.

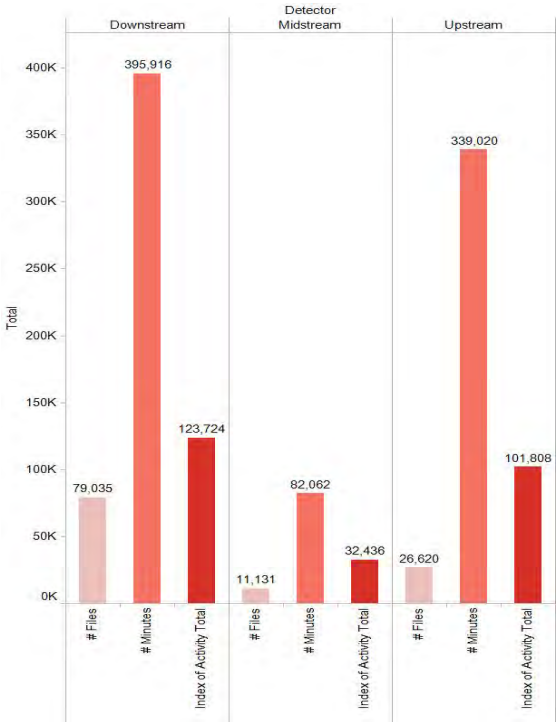

Figure 10. Activity and level of study effort by detectors in 2008.

3.4 Overall Distribution of Activity by Species

Species activity rates by month at all detectors pooled was largely consistent with overall species richness trends, i.e., most species were present and active in the summer months; however, up to 12 species were active through the winter (December–February). The most active winter species were: *T. brasiliensis* and *N. macrotis*. Other species active in the winter included; *A. pallidus*, *C. townsendii*, *Eptesicus fuscus*, *Eumops perotis*, *I. phyllotis*, *Lasirius cinereus*, *Lasirius xanthinus*, *Myotis californicus*, *Myotis ciliolabrum*, *Myotis yumanensis*, and *P.hesperus.*

Antrozous pallidus was most active in July and August but was present throughout the year (Appendix B, B-4), and was also most active at Midstream Station except in 2006 and 2008, although this preference was not significant (P = 0.728, DF = 2). *Corynorhinos townsendii* was most active, although at low levels (IA < 170), during June through August and was also recorded in the spring and early fall but was not detected in January, November, or December (Appendix B, B-5). *Corynorhinos townsendii* showed preference for Midstream Station, but this was not significant (P = 0.120, DF = 2). *Eptesicus fuscus* was active at some level in the Wash for 11 months of the year, with no activity in January (Appendix B, B-6), but IA rates were not significantly different between detector stations (P = 0.873, DF = 2).

Euderma maculatum was detected rarely during the study period, with the only recorded call sequences in August (Appendix B; B-7), and it showed no significant preference for habitat type (P = *0*.368, DF = 2). *Eumops perotis* IA rates were similar in seasonal distribution to *C. townsendii* but were dissimilar in magnitude. Peak IA rates for *E. perotis* were in June and August; it was not recorded in November, December or January, but had a small increase in activity in February (Appendix B, B-8). *Eumops perotis* showed a significant preference for Downstream Station (P = *0*.006, DF = 2). *Idionycteris phyllotis* activity was highest in July during all five survey years combined and was confined to the warmest months, from April through November (Appendix B, B-9). This species preferred Upstream Station significantly more than the other two monitoring units (P = *0*.000, DF = 2).

Activity patterns of *Lasiurine* species indicated presence of *Lasiurus blossevillii*, *Lasiurus cinereus*, *Lasionycteris noctivagans* and *Lasiurus xanthinus* throughout the spring, summer, and fall, with substantial activity during the spring and fall migration periods (Appendix B, B-10 to B-13). *L. blossevillii* and *L. noctivagans* occurred in the spring and fall migration period, with substantial activity also recorded in the summer period by *L. blossevillii*. *Lasiurus blossevillii* showed no significant preference for any of the three detector stations (P = *0*.839, DF = 2). *Lasiurus noctivagans* preferred Midstream and Downstream stations more so than Upstream Station, however this preference was not significant (P = 0.022, DF = 2). *Lasiurus cinereus* and *L. xanthinus* were active during the summer residency period and less so during the early spring, late fall, and winter months. *Lasiurus cinereus* preferred the habitat at Upstream Station more so than Downstream or Midstream (P = 0.002, DF = 2). *Lasiurus xanthinus* showed no significant preference for any of the three detector stations (P = 0.918, DF = 2). The presence of *Macrotus californicus* was sporadic during the entire five year study period. The species was documented at very low (IA = <1.0) rates during May, July, and August only (Appendix B, B-14). *Macrotus californicus* showed no significant preference for habitat type (P = 0.347, DF = 2).

Myotis species occurred frequently throughout each year of the study period (Appendix B, B-15 to B-18). *Myotis californicus* was most active from March through October, with some minor activity recorded during January, February, November and December, and it showed no significant preference for habitat type (P = 0.330, DF = 2). *Myotis ciliolabrum* was less active in the cooler months and was present from April through November, with minor spikes of activity recorded in February; it showed no significant preference for habitat type (P = 0.232, DF = 2). *Myotis thysanodes* was active during the warmer period of the year, primarily May through September, although some activity was recorded in March, April, and October, and showed no significant preference for habitat type (P = 0.324, DF = 2). *Myotis yumanensis* activity peaked in August and September, but was also active throughout the year; it showed no significant preference for habitat type (P = 0.338, DF =2).

Nyctinomops macrotis activity was highly episodic, with the greatest rates occurring in June, July, and August; activity rates decreased by a magnitude of ten during the spring and fall, and some activity was also recorded in the winter months (Appendix B, B-19). This species showed a significant preference for Upstream Station (P = 0.000, DF =2). Similar to *N. macrotis*, *P. hesperus* was active primarily in June, July, and August, with lower rates recorded in the early fall and late spring (Appendix B, B-20). *Parastrellus hesperus* showed no significant preference for habitat type (P = 0.010, DF =2). *Tadarida brasiliensis* was consistently more active than other species during the cooler months, but still exhibited highest activity rates during July and August (Appendix B, B-21). This species showed no significant preference for habitat type (P = 0.063, DF =2).

3.5 Weather

The Hobo Pro Series data loggers deployed during the study period operated sporadically and provided a relatively inconsistent data set (Table 4–6). Overall, data collection was most consistent (i.e., low rates of data loss) at Downstream Station. Upstream and Midstream stations had substantial data loss, primarily in 2005, 2006, and 2007 (Tables 4–6).

Average monthly temperatures ranged from 43.02 °F in January 2007 to 90.43^{o} F in July 2006, both recorded at Downstream Station. All stations recorded similar trends in average monthly temperatures, despite differences in study effort.

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Grand Total
2004	N/A	52.51	57.6	62.7	74.32	79.03	86.92	82.53	75.78	N/A	47.55	44.50	67.73
2005	51.19	74.57	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	64.19
2006	N/A	N/A	N/A	N/A	N/A	N/A	89.12	85.23	76.46	63.22	45.35	45.49	75.07
2007	43.85	48.95	58.01	65.67	71.87	72.41	70.26	69.35	N/A	N/A	N/A	N/A	62.29
2008	N/A	N/A	N/A	65.57	83.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	73.12
Total	47.64	60.57	61.31	67.90	77.54	77.57	79.38	81.05	76.17	63.22	47.39	44.53	68.21

Table 4. Hobo temperature data at Upstream Station, Las Vegas Wash, 2004–2008.

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Grand Total
2004	48.05	47.44	65.05	67.59	74.38	81.06	84.69	81.46	72.76	64.7	0.00	48.75	68.71
2005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	72.44	72.44
2008	72.35	72.19	75.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	72.41
Total	60.01	59.81	65.93	67.59	74.38	81.06	84.69	81.46	72.76	64.70	N/A	68.27	69.50

Table 5. Hobo temperature data at Midstream Station, Las Vegas Wash, 2004–2008.

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Grand Total
2004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46.45	46.45
2005	49.88	52.42	58.32	64.28	77.44	82.42	90.23	84.58	76.83	65.97	54.17	45.55	66.94
2006	48.12	51.69	55.46	66.79	78.89	87.03	90.43	86.31	75.41	62.29	53.03	43.61	66.75
2007	43.02	52.88	62.04	71.18	N/A	N/A	90.28	87.39	76.61	64.06	54.02	44.44	62.18
2008	44.75	50.37	59.96	66.46	72.77	80.27	89.03	86.69	72.88	N/A	N/A	N/A	62.85
Total	45.93	51.83	58.93	66.33	76.39	83.61	90.1	86.24	76.21	64.11	53.75	44.83	64.84

Table 6. Hobo temperature data at Downstream Station, Las Vegas Wash, 2004–2008.

4.0 CAPTURE MONITORING RESULTS

4.1 Level of Effort

The capture study was conducted from June through October 2008 and again from April through September 2009. These surveys were performed during the spring, summer, and early fall. Temperature and wind determined if monitoring would occur each month. All bats were captured in mist nets or harp traps, set at each site for one night per month. Each survey season lasted six months, starting in spring and ending in fall (Appendix F).

Nets and traps were set for 47 nights, and 30 of those nights resulted in animals being captured. There were 18 successful trap nights in 2009 and 12 capture nights in 2008. Nature Preserve and LLVMW had four nights of bat captures in both 2008 and 2009; Pabco had three capture nights in 2008 and then doubled to six capture nights in 2009; and CC had one night of bat capture in 2008 and then jumped to four successful trap nights in 2009 (Table7).

	Number of Successful Capture Nights				
Year	Nature Preserve	Pabco	Cottonwood Cell	LLVMW	Total
2008	4	3	1	4	12
2009	4	6	4	4	18
Total	8	9	5	8	30

Table 7. Total number of successful capture nights out of 47 attempts.

4.2 Species Richness and Abundance

Throughout the entire survey, 195 bats were captured, 70 in 2008 and 125 in 2009. The number of species also increased from 2008 to 2009, with seven species identified in 2008 and eight identified in 2009. Three of these bats have a state protected listing (Table 2). Species richness varied between each site, and no site had captures of all eight species.

During both study years, *A. pallidus* was the only bat confirmed at all four sites. Both NP and Pabco showed the greatest species richness with seven species identified over the course of the study. Pabco was lacking *Myotis ciliolabrum*, and NP was missing *C. townsendii*. The lowest species richness was at CC, where only three species were documented. Both CC and Pabco sites increased in species richness from the 2008 surveys. The NP site decreased in species richness, with seven species captured in 2008 and only three caught in 2009. LLVMW stayed the same for both years, with five species caught both years (Appendix C, C-1 to C-4). Species richness was highest in the summer months of July, August, and September (Table 8).

Antrozous pallidus and *Myotis yumanensis* were the most captured bats at all four sites (Table 8). Combined, *A. pallidus* and *Myotis yumanensis* accounted for 76% of the bat captures for the entire study. *Antrozous pallidus* was the most frequently captured species at Pabco and CC, while *Myotis yumanensis* was the most captured species at NP and LLVMW. The least captured bat was *C. townsendii*, captured only once at the Pabco site. Overall site abundance was greatest at LLVMW with 96 animals captured, and CC had the lowest abundance with eight animals captured during the study (Appendix C, C-1 to C-4). LLVMW was the most abundant site and CC was the least abundant for both 2008 and 2009. All sites increased in abundance except NP, where 13 animals were captured in 2008 and only 11 in 2009. Species abundance was highest in July and lowest in October and April (Table 8).

	Number of Animals Captured										
Month	**ANPA**	**COTO**	**LAXA**	**MYCA**	**MYCI**	**Myotis sp.**	**MYYU**	**PAHE**	**TABR**	**Total**	**Richness**
April	1									1	1
May	10					2	4			16	3
June	30		2				1	3		36	4
July	16		1	4	1	3	45	3	2	75	8
August	2		1	1		1	13	1	1	20	7
September	4	1		11	4	1	20		3	44	7
October							3			3	1
Total	63	1	4	16	5	7	86	7	6	195	

Table 8. Species richness and number of animals captured by month for all sites from April 2008 through October 2009.

4.3 Sex and Reproductive Status

The capture survey identified 71 males, 116 females; the sex of eight bats was unknown (Figure 11). In 2008, 31% of all bats captured were reproductive (Table 9), and in 2009, 57% of the bats caught were reproductive (Table 10). Both years combined showed almost half (48%) of the bats to be reproductive; *T. brasiliensis* was the only species captured not in a reproductive state. Almost all females captured in a reproductive state were either lactating or post-lactating. *Antrozous pallidus*, *Myotis yumanensis*, and *Lasiurus xanthinus* were the only three species that had pregnant females (Table 9 and 10).

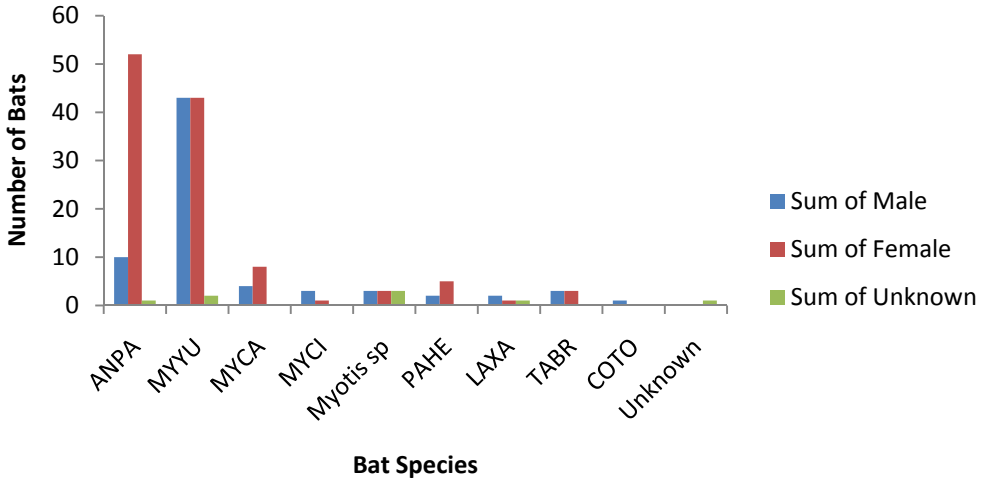

Figure 11. Sex of all bats captured in 2008 and 2009.

	Reproductive Status							
	Male		Female				Unknown Sex	Total Captured
Species	Non-Reproductive	Scrotal	Non-Reproductive	Pregnant	Lactating	Post-Lactating		
Antrozous pallidus	3	1	4		11			19
Myotis yumanensis	6	5	8			1		20
Myotis californicus	3	1	8					12
Myotis ciliolabrum	3		1					4
Myotis sp.			2				2	4
Parastrellus hesperus	1		1		1	2		5
Lasiurus xanthinus	2						1	3
Tadarida brasiliensis	1		2					3
Total	19	7	26	0	12	3	3	70

Table 9. Reproductive status of all bats captured in 2008.

	Reproductive Status							
	Male		Female				Unknown Sex	Total Captured
Species	Non-Reproductive	Scrotal	Non-Reproductive	Pregnant	Lactating	Post-Lactating		
Antrozous pallidus		6	8	3	21	5	1	44
Myotis yumanensis	16	16	18	1	1	13	2	67
Myotis californicus			1					1
Myotis sp.	1	2				1	1	5
Parastrellus hesperus		1	1					2
Lasiurus xanthinus				1				1
Tadarida brasiliensis	2		1					3
Corynorhinus townsendii		1						1
Unknown							1	1
Total	19	26	29	5	22	19	5	125

Table 10. Reproductive status of all bats captured in 2009.

4.4 Overall Distribution of Captures by Species

Species activity differed among all four sites. Two species, *A. pallidus* and *T. brasiliensis* were captured at all four sites (Appendix C, C-1 to C-4). Only two bats were found over the majority of the capture season, *A. pallidus* and *Myotis yumanensis.* For most of the species, the bulk of their activity was during the summer months of June, July, and August.

Antrozous pallidus was active from April through September, with June being the most active of all the months (Appendix C, C-5). This species was captured at all four sites but was also the primary species at two sites, CC and Pabco (Appendix C, C-1 to C-4). Throughout the study, *A. pallidus* females were captured more than any other female species (Figure 11), most in a reproductive state (Table 9 and 10). Only one *C. townsendii*, a reproductive male (Table 10), was captured at the Pabco site in September (Appendix C, C-6).

Lasiurus xanthinus were only documented in June, July, and August (Appendix C, C-7), caught primarily at the Pabco site, but one was also captured at NP (Appendix C, F C-1 and C-3). Four *L. xanthinus* were identified throughout the study: two were non-reproductive males, one was pregnant, and one was unknown because it escaped when it was removed from the net.

Myotis species were captured at all four sites, and it was the main genus captured at the Wash. Three myotis species were captured during the study: *Myotis californicus*, *M. ciliolabrum*, and *M. yumanensis*. More were non-reproductive than reproductive (Table 9 and 10). *Myotis californicus* was identified at three sites, NP, Pabco and LLVMW, whereas *M. ciliolabrum* was only found at two sites, NP and LLVMW. *Myotis californicus* and *M. ciliolabrum* were captured mostly during July, August, and September (Appendix C, C-8); *M. yumanensis* was found from May through October (Appendix C, Figure 9); and *M. yumanensis* was captured at three sites, NP, Pabco and LLVMW, and was the primary species captured at NP and LLVMW. *Myotis yumanensis* was the most captured bat throughout the study (Table 8).

Parastrellus hesperus was active in the summer months, June, July, and August (Appendix C, C-10) and was captured at NP, Pabco, and LLVMW. More *P. hesperus* females were captured than males (Figure 11), with an almost even number of non-reproductive and reproductive individuals (Table 9 and 10). *Tadarida brasiliensis* was also only captured for three of the summer months: July, August and September (Appendix C, C-11). It was captured in low numbers but was present at all four sites (Appendix C, C-1 to C-4). An even number of male and female *T. brasiliensis* were captured throughout the study (Figure 11), all non-reproductive (Table 9 and 10).

5.0 DISCUSSION

5.1 Acoustic Monitoring

The five year bat acoustic monitoring study provided a nearly continuous assessment of bat activity and habitat use patterns at three different locations within the Wash. Yearly patterns of species diversity and overall activity rates trended upward at most stations from 2004 to 2008. The assemblage of bat species changed over time, increasing in overall species richness. Seasonal variations in species occurrence and activity levels were confirmed. Differences between detector stations were measured, and habitat seemed to be a significant factor in bat activity levels, primarily at Downstream Station.

At Upstream Station from 2004 to 2007, species richness decreased from 15 to 8; however, there was a secondary increase from 2007 to 2008, when nine species were recorded. Index of Activity values were variable from year to year. Overall activity levels were greatest in 2006; however, IA decreased from 2006 to 2007 and then increased in 2008. Only Upstream Station exhibited a clear and consistent pattern of declining species diversity coupled with increasing levels of activity from 2005 to 2006 (Table 1), possibly a function of changes in the vegetation adjacent to the detectors, competitive pressure between species, or influenced by food resource availability (Patterson et al. 2006).

Downstream and Midstream stations had less variability in species richness levels throughout the study period than Upstream Station. Peak overall species richness occurred at Midstream Station in 2008 and at Downstream Station in 2004 and 2008. The lowest species richness was documented in 2006 at Midstream Station and 2007 at Downstream Station. Despite the observed variability in species richness and IA, no significant relationship was found between IA and species richness.

Activity rates at all detectors pooled were highest in 2006, followed by 2008. Year 2005 was slowest in terms of activity (IA), followed by 2004. The survey effort (i.e., total number of detector nights) during 2004 and 2005 was greater overall than in 2006, 2007, or 2008. Although survey effort differed between years (Table 1), inconsistent activity rates were probably not a function of differences in survey effort (detector-nights) because effort was relatively high in both 2004 and 2005 (n = 963 and 1,012, respectively). Furthermore, the calculation of IA is based on total minutes of activity per unit of effort (detector-nights) and should therefore eliminate most of the bias associated with discrepancies in survey effort between detector stations and years.

We anticipated that habitat type (detector station) would have a significant effect on IA rates across years, but no significant difference was found between IA rates at Midstream or Upstream stations. A significant difference was found between Downstream Station and the other two stations (p = 0.007, DF = 4), signifying that habitat affected bat activity levels at Downstream Station more so than at the other detector sites. Habitat type, and/or location, was a factor in determining the degree and type of bat activity at Downstream Station; however, habitat type was not a factor that affected bat activity (IA) at the other two detector stations.

There was no significant difference in IA among years at Upstream and Midstream stations. Among years at Downstream Station, year 2008 was significantly different than all prior years. Upstream had a greater difference in IA than the downstream station over the five year study period, from a low of 7,652 to a high of 195,834, whereas the Downstream had a low of 6,289 and a high of 123,724. One possible explanation for the significant increase in activity rates at Downstream Station and not at Upstream Station between the first four study years and 2008 was the dramatic rise in *P. hesperus* and *T. brasiliensis* activity rates. Index of Activity rates for both these species increased nearly ten fold between 2007 and 2008.

During the entire five year monitoring program most species (n = 15) did not prefer any one habitat. Three species (*I. phyllotis*, *Lasiurus cinereus*, and *N. macrotis*) preferred Upstream Station significantly more than Midstream or Downstream stations. During the initial two years of the study (O'Farrell and Shanahan 2006) found that six species (*A. pallidus*, *Eptesicus fuscus*, *Eumops perotis*, *Lasiurus xanthinus*, *N. macrotis*, and *T. brasiliensis*) favored one specific habitat type (detector station). In 2004 and 2005, *A. pallidus* favored Midstream more than Downstream, but this trend was not consistent throughout the five year study period, and *A. pallidus* activity levels seemed to become more widespread among the three detector stations. Similarly, *Eptesicus fuscus*, *Lasiurus xanthinus*, and *T. brasiliensis* favored Upstream over the other habitats in 2004 and 2005, but this trend did not continue throughout the study period. The habitat preferences exhibited by each species during the entire five year period seem to indicate that the habitat across detectors became more homogenous over time, or resource concentrations between detectors became similar. Upstream Station was the only habitat selected more frequently by any of the 18 species during the pooled results of the five year study.

Four species considered uncommon in Nevada (*Lasiurus xanthinus*, *N. macrotis*, *Eumops perotis*, and *Macrotus californicus*) were consistently active in the Wash during the five year monitoring period. *Lasiurus xanthinus*, *N. macrotis*, and *Eumops perotis* are considered sensitive species (S1) with "critically imperiled" population statuses (Bradley and O'Farrell 1967, Nevada Natural Heritage Program 2004, Bradley et al. 2006). The Nevada population of *Macrotis californicus* is listed as S2, "imperiled" (Nevada Natural Heritage Program 2004). It was recorded infrequently with very low IA rates in 2004 at Downstream Station and at Midstream Station in 2008. The species was not confirmed during any other years and was only recorded in May, July, and August (Table 3). The low rate of activity and sporadic occurrence of *Macrotus californicus* signifies that it was likely not a resident of the Wash or the immediate vicinity.

Lasiurus xanthinus was recorded during each of the five study years at Downstream Station, and nearly every year at Upstream and Midstream stations (Table 3). The population of *L. xanthinus*

in the Wash was considered "transient" in nature after the second year of acoustic monitoring (O'Farrell and Shanahan 2006); however, the species was active in the Wash nearly year round thereafter and was present annually during the five year study period (Table 3; Appendix B, Figure 13). *Lasiurus xanthinus* occurred more commonly than *Macrotus californicus* and exhibited activity patterns more indicative of a resident population (O'Farrell et al. 2004).

One of the most striking changes in species occurrence was the presence and activity of *N. macrotis* in the Wash from 2004 to 2008 (O'Farrell and Shanahan 2006). *Nyctinomops macrotis* occurs throughout South America, Central America, and southern North America and has been documented historically (Bradley et al. 1965) and recently in Nevada (Williams 2001). It is primarily migratory in the northern part of its range. The species was documented at very low levels in 2004 and 2005 at Upstream Station, but IA rates increased substantially in 2006 through 2008. *Nyctinomops macrotis* was documented at low levels during most years at Midstream and Downstream detector stations. The vast majority of *N. macrotis* activity was recorded during June, July, and August, which is consistent with other bat species' temporal activity patterns in the Wash. The known migratory behavior patterns of *N. macrotis* are consistent with the seasonal occurrence patterns observed in the Wash and signify that the population using the Wash is likely migratory (Milner et al 1990). The relative consistency in activity rates in the latter years of the study may denote that *N. macrotis* is a more common component of the Wash's bat assemblage than initially suggested (O'Farrell and Shanahan 2006). *Eumops perotis californicus* occurred less frequently during the study period than *N. macrotis*, but more frequently than *Macrotus californicus*. *Eumops perotis californicus* was documented in 2004 and 2005 at all detector stations but was not detected at Upstream or Midstream in 2006, then was documented sporadically, nearly year round, in 2007 through 2008. The Wash is likely used more frequently by the species than initially assumed in 2004 and 2005 (O'Farrell and Shanahan 2006); however, *E. perotis* likely occurs at low densities, as indicated by the relatively low level of IA. The species may use the Wash during regional movements to more preferable foraging areas north of the study site (O'Farrell and Shanahan 2006).

Overall, *Lasiurus blossevillii* activity was low throughout the monitoring period (Table 3), but the occurrence of the species became more frequent in the last three years of the study (Table 3). It was most active at Downstream Station and was noticeably more active during the spring and fall periods than other *Lasiurine* species, with peak *Lasiurus blossevillii* activity recorded in September across all years and detector stations (Appendix B, B-10). The seasonal occurrence patterns of this species suggest that it occurs in the Wash primarily during biannual migration periods, but also during the summer, presumably a result of a seasonal resident population. O'Farrell speculated in 2006 that this population likely consisted of males and non-reproductive females (O'Farrell and Shanahan 2006). *Lasiurus blossevillii* was not caught during the capture surveys, so the capture and acoustic data do not confirm this assertion.

Idionycteris phyllotis was documented only at Midstream Station in 2004, and 2008 and at Upstream Station in 2006 and 2007. The species was active at low levels in all years with the exception of 2007, when IA jumped to 15,258 (Table 3). The high rate of activity observed in 2007 was not seen again in subsequent study years. Seasonal occurrence trends of *I. phyllotis* followed overall seasonal activity patterns among species, with the greatest activity occurring in July (Appendix B, B-9). Possibly *I. phyllotis* occurred as a resident species in the vicinity of the

Wash, at least during 2007. The large amount of activity documented at Upstream Station in 2007 may signify that the species was using the Wash for foraging on a regular basis. Although *I. phyllotis* is known to occur in riparian habitats in Nevada, based on the information collected to date it is not likely a resident of the Wash (Bradley et al. 2006).

Myotis thysanodes occurred sporadically during the study period, with most activity at Upstream and Midstream stations, primarily at Midstream Station in 2008. This species was active in the Wash during the warmer months, primarily May through October, with some activity in March and April. This seasonal distribution of activity is consistent with the known life history traits of *M. thysanodes* in Nevada (Bradley et al. 2006). *Myotis thysanodes* is likely a summer resident in the vicinity of the Wash and it may utilize nearby artificial or natural habitat for winter hibernacula (Bradley et al. 2006). *Myotis ciliolabrum* demonstrated inconsistent, and generally low (IA < 25), activity patterns in the Wash (Table 3). Because *M. ciliolabrum* is thought to prefer higher elevation areas and its occurrence patterns in the Wash were irregular, this species is not expected to be a resident of the Wash (Bradley et al. 2006). It likely used the Wash during regional movement between preferred habitat areas at higher elevations. *Corynorhinos townsendii townsendii* was recorded consistently during the study period. O'Farrell and Shanahan (2006) observed that the species likely roosts north of the Wash in the Rainbow Gardens area and may use the Wash for foraging on a regular basis. This observation was confirmed by trends in *C. townsendii* activity documented in 2006–2008. Activity of the species in the Wash may be increasing because the highest overall activity rates were recorded in 2008 (Table 3).

The most active species during the entire study period was *N. macrotis.* The occurrence of this species was limited primarily to Upstream Station during 2004–2008, and it was much less active at Midstream and Downstream stations. *Tadarida brasiliensis*, *P. hesperus*, and *Eptesicus fuscus* were also highly active during the study, but these species exhibited more consistency in occurrence patterns. *Eptesicus fuscus* and *T. brasiliensis* were documented at high rates of activity during all years of the study at all detector stations. *Tadarida brasiliensis* is typically a migratory species within the northern portion of its range; however, the consistent winter activity documented during the Wash bat acoustic monitoring study may indicate that the species occurs year round in the area. Bradley et al. (2006) cited the possibility of a non-migratory population of the species in southern Nevada; observed *T. brasiliensis* activity patterns in the Wash support this thesis.

The magnitude of *Myotis californicus* activity in the Wash during the winter period strongly suggests a resident population and local hibernacula. Like other species of Vespertilionidae in Nevada, *Myotis californicus* are known to arouse occasionally during winter hibernation to seek food and water (Bradley et al. 2006, Speakman and Thomas 2006), and because it is unlikely that individuals aroused from hibernation would consistently travel extensive distances to obtain food and water, a local, resident population of *Myotis californicus* probably exists in the immediate vicinity of, or within, the Wash. Similar to *Myotis californicus*, *Eptesicus fuscus* is known to occur year round in Nevada and is frequently active during the winter (Bradley et al. 2006). The magnitude of activity documented during the winter months in the Wash provides evidence of a resident *Eptesicus fuscus* population, and possibly a local hibernaculum.

Mean monthly temperatures were highest in June, July, and August, anecdotally corresponding to the highest rates of bat activity. Consistently, at all detector stations and in each of the five survey years, bat activity was highest during June, July, and August, presumably due to the high mean nightly temperatures, as documented by the Hobo data loggers (Racey and Swift 1985, Speakman and Thomas 2006).

The within-year variability in overall species richness and IA rates were most likely a function of temperature as well as species-specific migration and hibernation strategies (O'Donnell 2000, Speakman and Thomas 2006, Kusch et al. 2004). Species richness was highest during the summer months and lowest in the winter. Moderate species richness was observed in the spring and fall. Mean nightly temperatures were lowest in January, December, and February, respectively. Six species were recorded during each winter month (December, January, and February): *Lasiurus cinereus*, *Myotis californicus*, *Myotis yumanensis*, *N. macrotis*, *P. hesperus*, and *T. brasiliensis*. Seven species were recorded during at least one month during the winter: *A. pallidus*, *Corynorhinus townsendii*, *Eptesicus fuscus*, *Eumops perotis*, *I. phylloti*, *and Myotis ciliolabrum.* Of the 12 species present during the winter months, the majority were active at very low levels (Appendix B). Of the six species active during all three months of winter, *N. macrotis* had the greatest IA values, followed by *T. brasiliensis*, *P. hesperus*, *Myotis californicus*, *Myotis yumanensis*, and *Lasiurus cinereus*.

There is potential bias in accurately identifying acoustic call sequences recorded at passively deployed ultrasonic monitoring stations, but accurate identification is possible, especially when a conservative approach is taken (O'Farrell et al. 1999). For example, the mean characteristic frequency of *N. macrotis* call pulses is substantially lower than most species with similar call pulse slope and frequency modulations; therefore there is little reason to believe that *N. macrotis* could not be accurately differentiated from other species. Some similarity in call pulse structure exists in the upper frequency range of *N. macrotis* (approximately 16–18 kHz), where there may be some overlap with *Lasiurus cinereus.* However, *L. cinereus* call sequences in this range are typically low slope (flat), "quasi-constant" frequency pulses, whereas *N. macrotis* calls in the upper band of their frequency range are typically "frequency modulation" type calls with steep slopes and large frequency band widths, and are therefore easily identifiable.

There are inherent difficulties in attempting to interpret the number of recorded call files from a passive acoustic monitoring system as an indication of abundance, but IA rates do reflect a general level of bat abundance near the three monitoring stations. The limited maximum range of a single Anabat detector (approximately 30 m [100 ft]) makes the characterization of landscape-scale movements, such as migration, difficult to assess. Index of Activity rates at a given detector may or may not reflect the absolute level of bat activity present in the study area, although some research has suggested that there may be a relationship between the number of call pulses recorded and bat abundance (Gorresen et al. 2008). The bias in passive acoustic studies of this type stems from the unknowns associated with recorded call sequences. For example, a single foraging individual may produce a large number of call sequences that are within the range of a given detector set. Conversely, a large number of individual bats may pass the detector set and produce an equally large number of call sequences. However, the calculation of an IA can eliminate some of these biases (Miller 2001). The comparison of the

acoustic data collected in the Wash with the concurrent mist netting effort were useful in confirming, or refuting, inferences made about species occurrence and activity rates.

5.2 Capture Monitoring

The two year capture monitoring study was able to provide a more detailed understanding of the sex and reproductive state of the bats using the Wash, as well as a better understanding of the areas being used by the animals because the locations differed from those of the acoustic monitoring sites.

Species richness and abundance increased from 2008 to 2009. All sites were located in similar habitat of cottonwoods and/or willows. All but one site increased in species richness and abundance. Nature Preserve was the only site to decrease in both species richness and abundance. Due to vegetation grooming in 2008, the site became too open and no longer had a flight corridor. The triple-high net was moved to a salt cedar corridor that directly led to the lower pond, which decreased species diversity from seven to three. The vegetation trimming and clearing also was the reason the double-high net was not put over the upper pond in 2009. *Parastrellus hesperus* was always captured over water at the NP, and loss of the net over the pond likely caused its lack of documention here in 2009.

Pabco, one of the oldest revegetation sites at the Wash, was chosen because it is a mature cottonwood area with a suitable flight corridor parallel to the water. This site was favored by *A. pallidus* for both study years. There were twice as many *A. pallidus* captured in 2009 than in 2008. In September of 2009 the Pabco site became the only site where *C. townsendii* was captured. Nothing dramatically changed at the Pabco site that would have made the site more favorable from one year to the next.

Cottonwood Cell was also chosen because it was a large cottonwood area close to the water. A triple-high net was set in potential flight paths but was constantly moved due to growth or destruction. At the end of the 2008 surveys, a beaver removed a large area of cottonwood trees that destroyed the flight path and created a large open area, requiring the net to be moved. The trees in the Cottonwood Cell grew at a rapid pace, requiring regular relocation of the high net. Bats were usually seen flying around the site, but very few were captured. Although there was constant change, species abundance and richness doubled from 2008 to 2009.

LLVMW has large, mature cottonwoods and willow trees that form perfect vegetation flight corridors lined with mature vegetation and small ponds. The three myotis species, *M. yumanensis*, *Myotis californicus* and *M. ciliolabrum* favored this site more than any of the others. LLVMW was the only site that *P. hesperus* was caught in vegetation, possibly because of the open ponds close to the triple-high net. One *A. pallidus* was captured in 2008, but none were caught in 2009. A *T. brasiliensis* was caught in 2009, but none were captured in 2008. The replacement of species caused the diversity to remain unchanged from one year to the next. In 2009, a significant amount of vegetation clearing occurred that removed so many plants that there was no longer enough vegetation to use the harp traps. Despite that, the species richness tripled from 2008 to 2009. A large number of *M. yumanensis* were captured in July and September that seemed to come from the willow trees growing over the pond. They were mainly present from dusk until two hours afterwards (approximately 8–10 pm).

5.3 Overall Comparison Between Capture and Acoustic Monitoring

Bradley and Niles (1972) developed a Wash species list of ten bats from the surrounding area. This monitoring study has identified 18 bats, 8 of which were documented by both acoustic and capture monitoring.

Although capture and acoustic techniques are both valuable, there were some differences between the studies. For example, *T. brasiliensis* was one of the most active species in the acoustic study but was very rare in the capture study. The acoustic studies showed this species to be active in the winter and potentially a resident species, but *T. brasiliensis* was only caught from July through September and was the only species not captured in a reproductive state. *Corynorhinos townsendii* was documented consistently in the acoustic surveys but only one was caught in the two year capture study.

These studies also complimented each other. *Antrozous pallidus* was one of the most caught species in the capture study occurring at all four sites along the Wash, but it showed up most at the Pabco site which was close to Midstream Station. The acoustic study showed that *A. pallidus* favored Midstream Station but was also widespread among all three detectors. The capture study showed *T. brasiliensis* and *Lasiurus xanthinus* to prefer Pabco and NP. The acoustic study showed *T. brasiliensis* and *L. xanthinus* to favor Upstream Station, which was located between the two sites. Originally *L. xanthinus* was thought to be a transient species (O'Farrell and Shanahan 2006), but the species was active nearly year round during the acoustic study, and although capture numbers were low, reproductive *L. xanthinus* were still caught. These data show that *L. xanthinus* is a resident in the study area. Both the acoustic and capture studies showed *Myotis ciliolabrum* to occur in low and inconsistent activity. *M. yumanensis* was active year round in the acoustic study and all months of the capture study.

This comprehensive study supports the implementation of multiple techniques to have an inclusive knowledge of species activity in an area. Activity rates of common and uncommon species have remained static, or in many cases, have increased since 2004. Results also suggest that habitat differences have become less important to bat activity levels between the monitoring stations along the Wash, possibly the result of vegetation changes over time or redistribution of food and water resources. The six year monitoring effort has provided a well-rounded and rigorous assessment of bat activity rates and species occurrence patterns in the Wash. The study is consistent with prescribed regional bat conservation goals and the Wash restoration initiative (Bradley et al. 2006).

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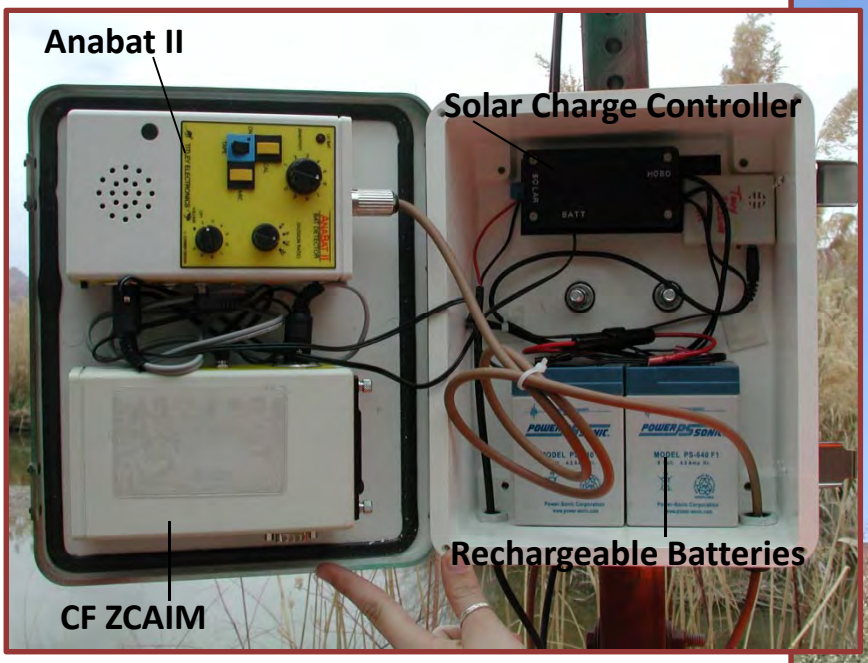
Appendix A

Bat Monitoring Photos

Acoustic Monitoring Station

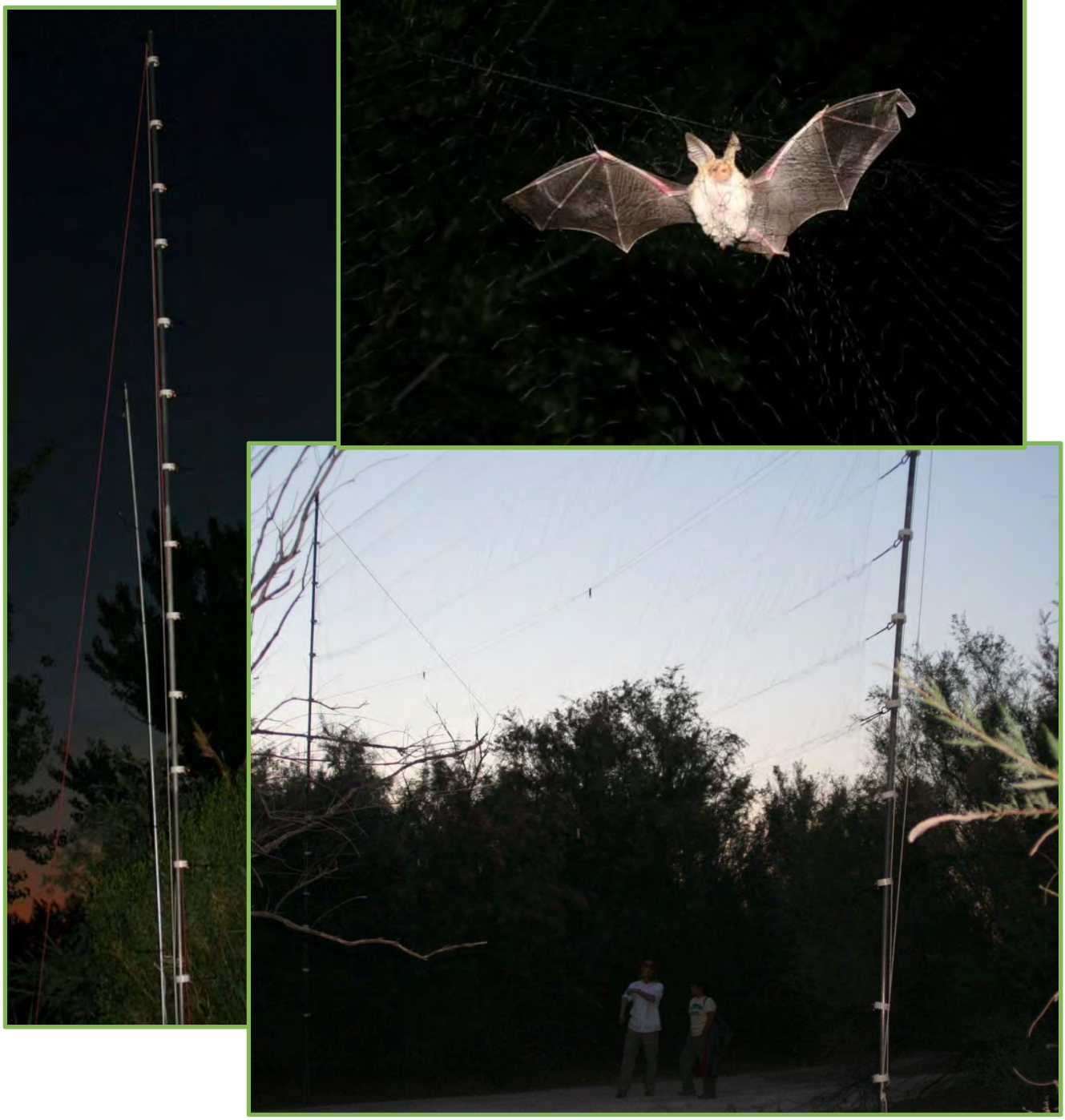


Harp Traps

Metal Rods with Clear Lines

Plastic Lined Canvas Bag

Mist Nets



Appendix B

Acoustic Monitoring Activity

Upstream IA

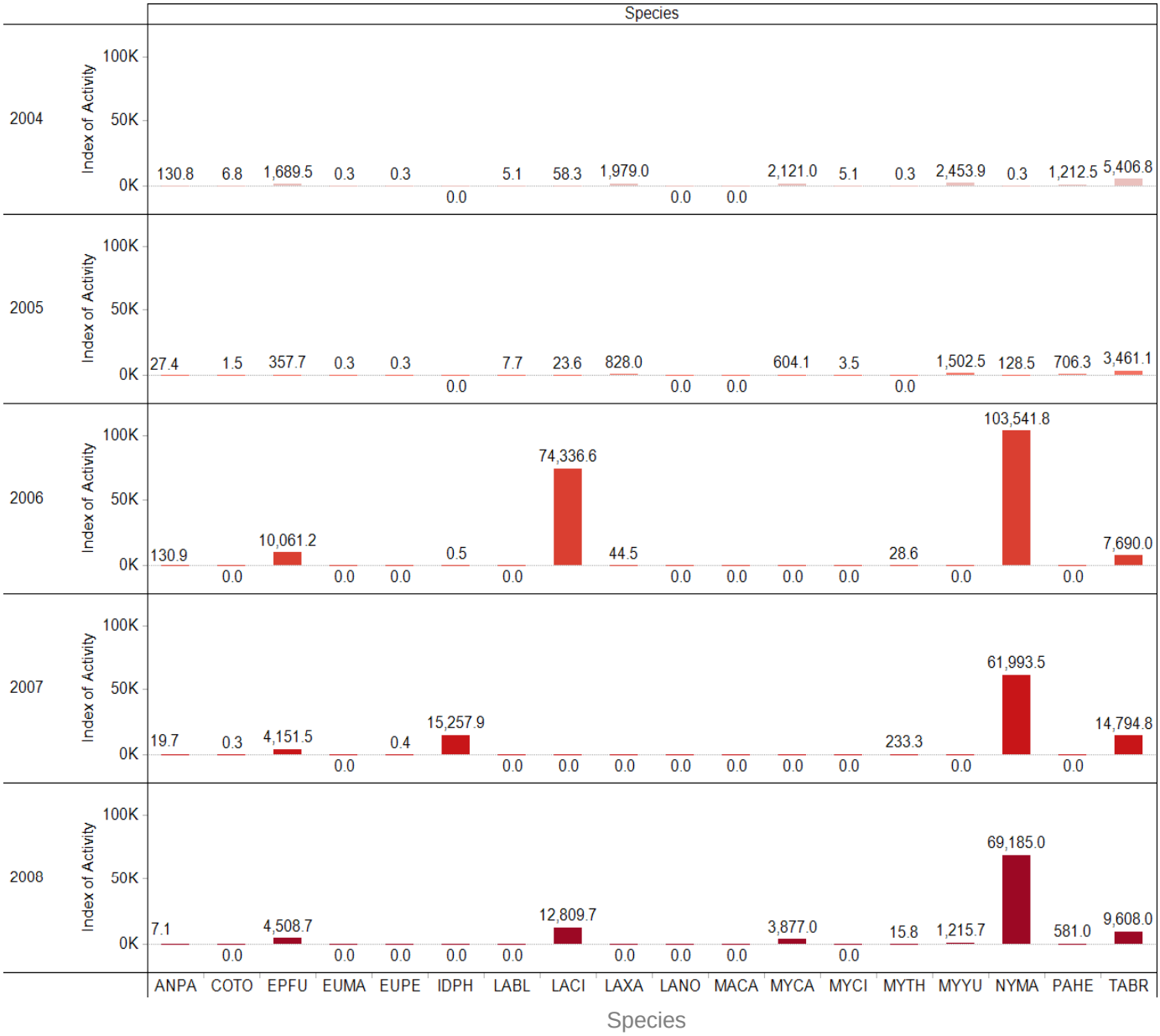


Figure B-1. Upstream Index of Activity for all species, 2004-2008

Midstream IA

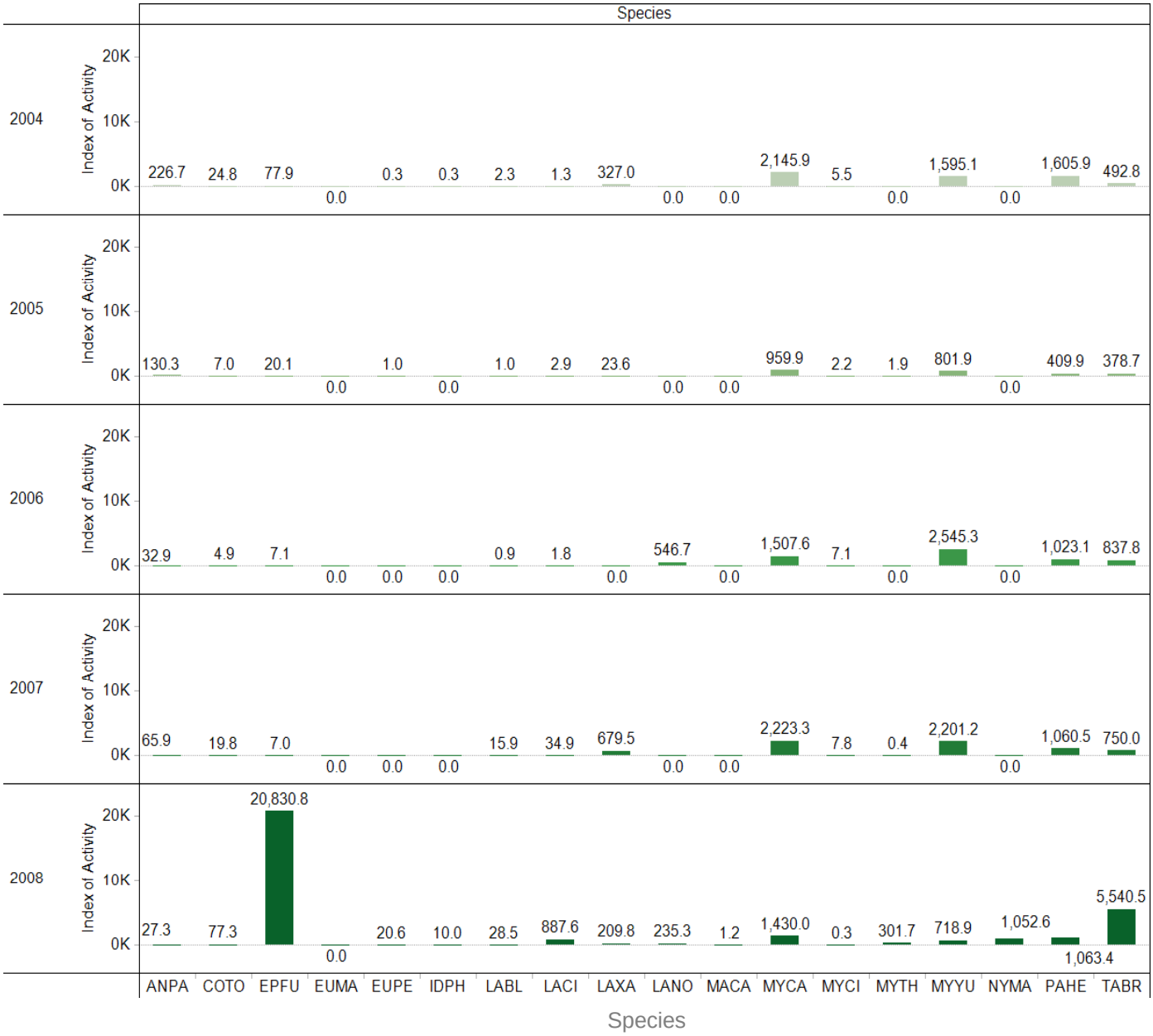


Figure B-2. Midstream Index of Activity for all species, 2004-2008

Downstream IA

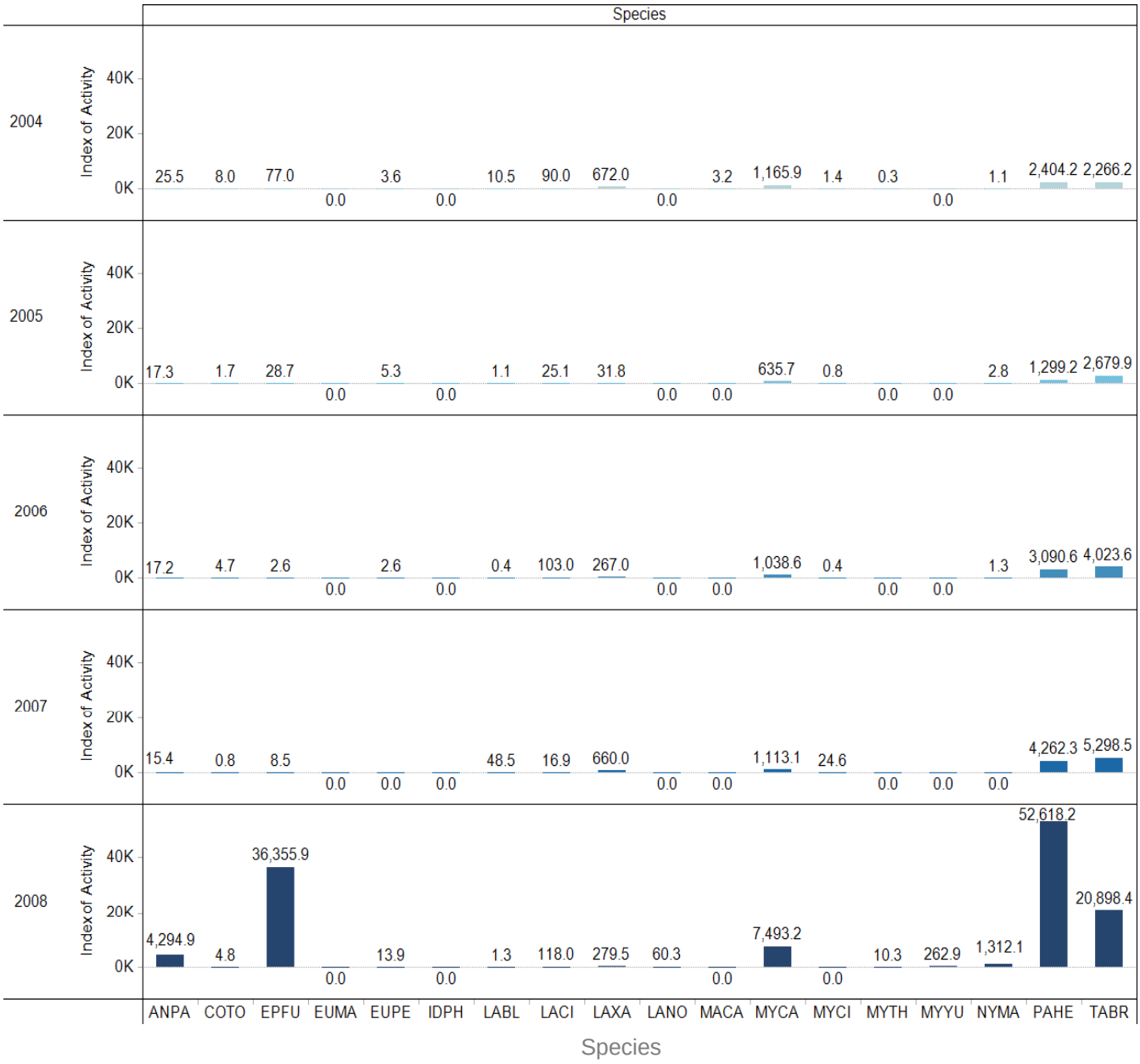


Figure B-3. Downstream Index of Activity for all species, 2004-2008

Antrozous pallidus

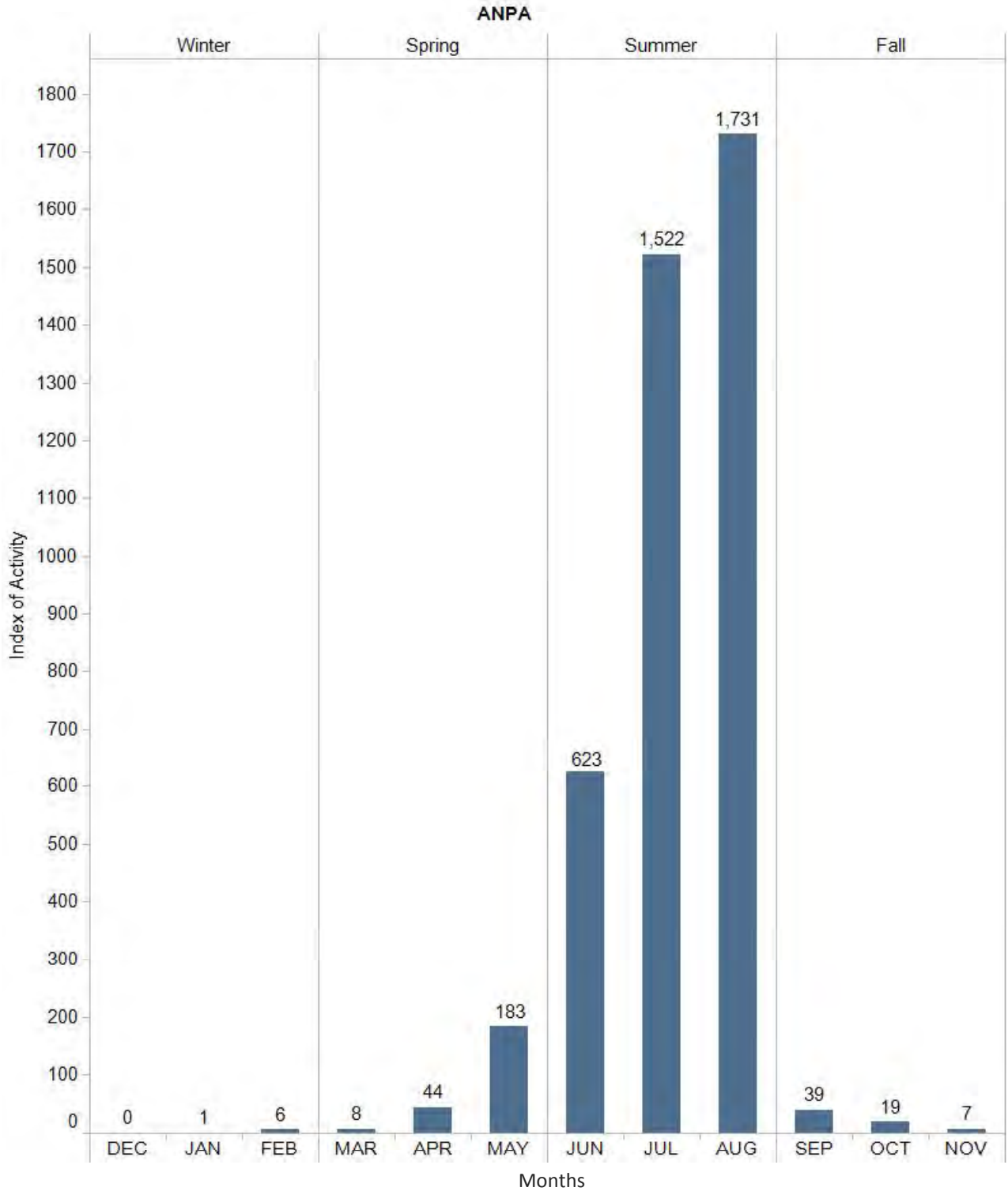


Figure B-4. *Antrozous pallidus* activity by month for all years, 2004-2008.

Corynorhinos townsendii townsendii

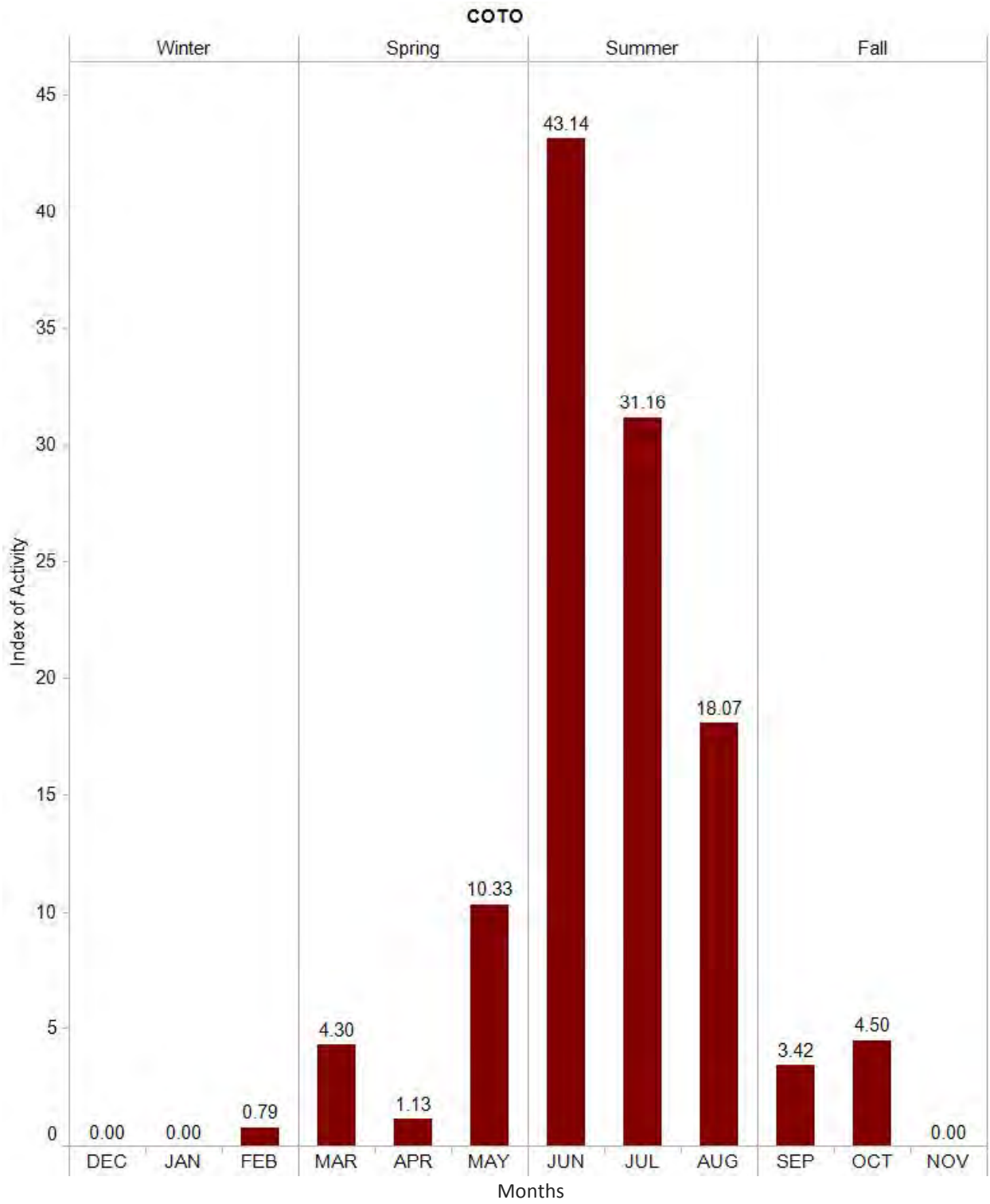


Figure B-5. *Corynorhinos townsendii townsendii* activity by month for all years, 2004-2008.

Eptesicus fuscus

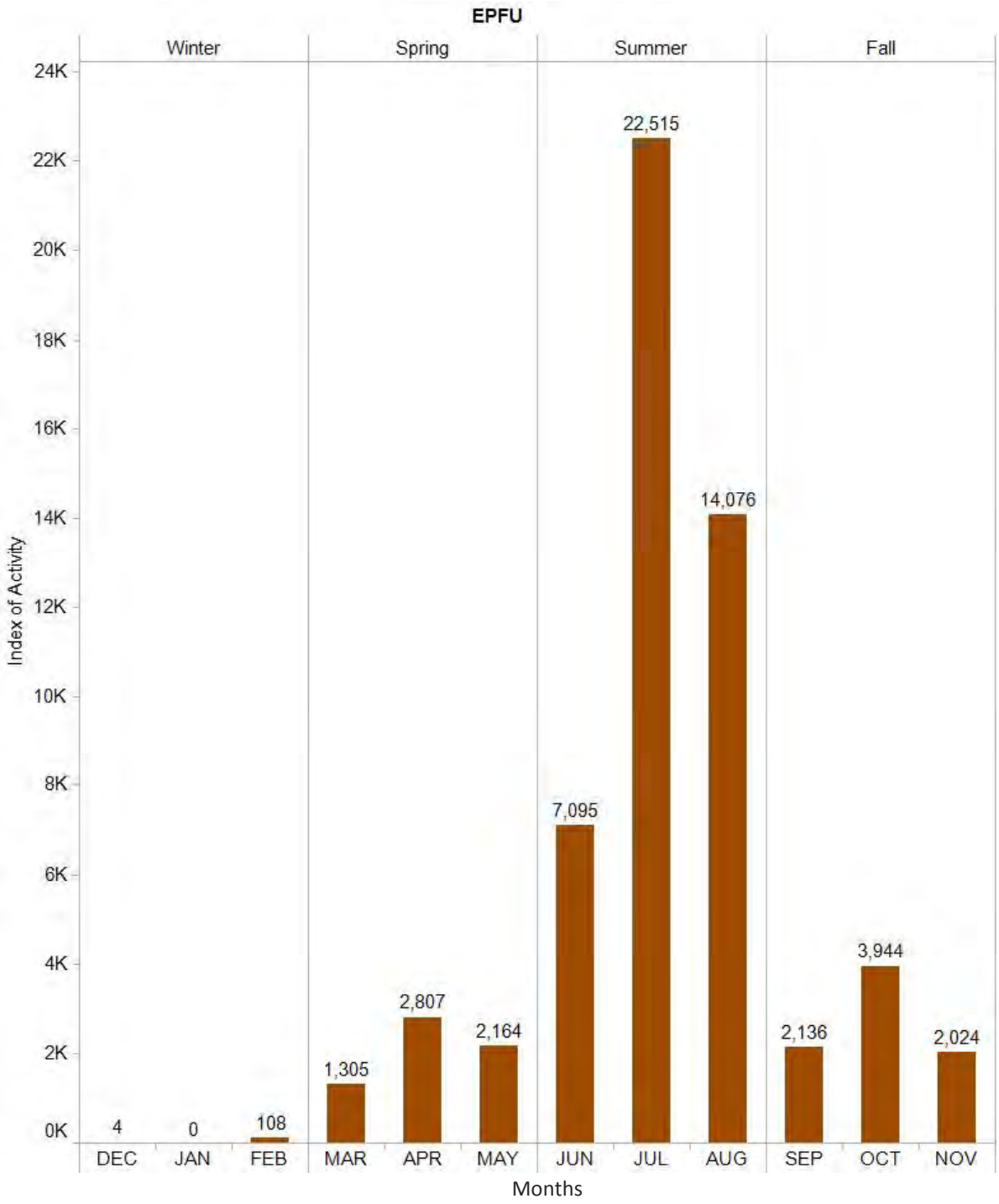


Figure B-6. *Eptesicus fuscus* activity by month for all years, 2004-2008.

Euderma maculatum

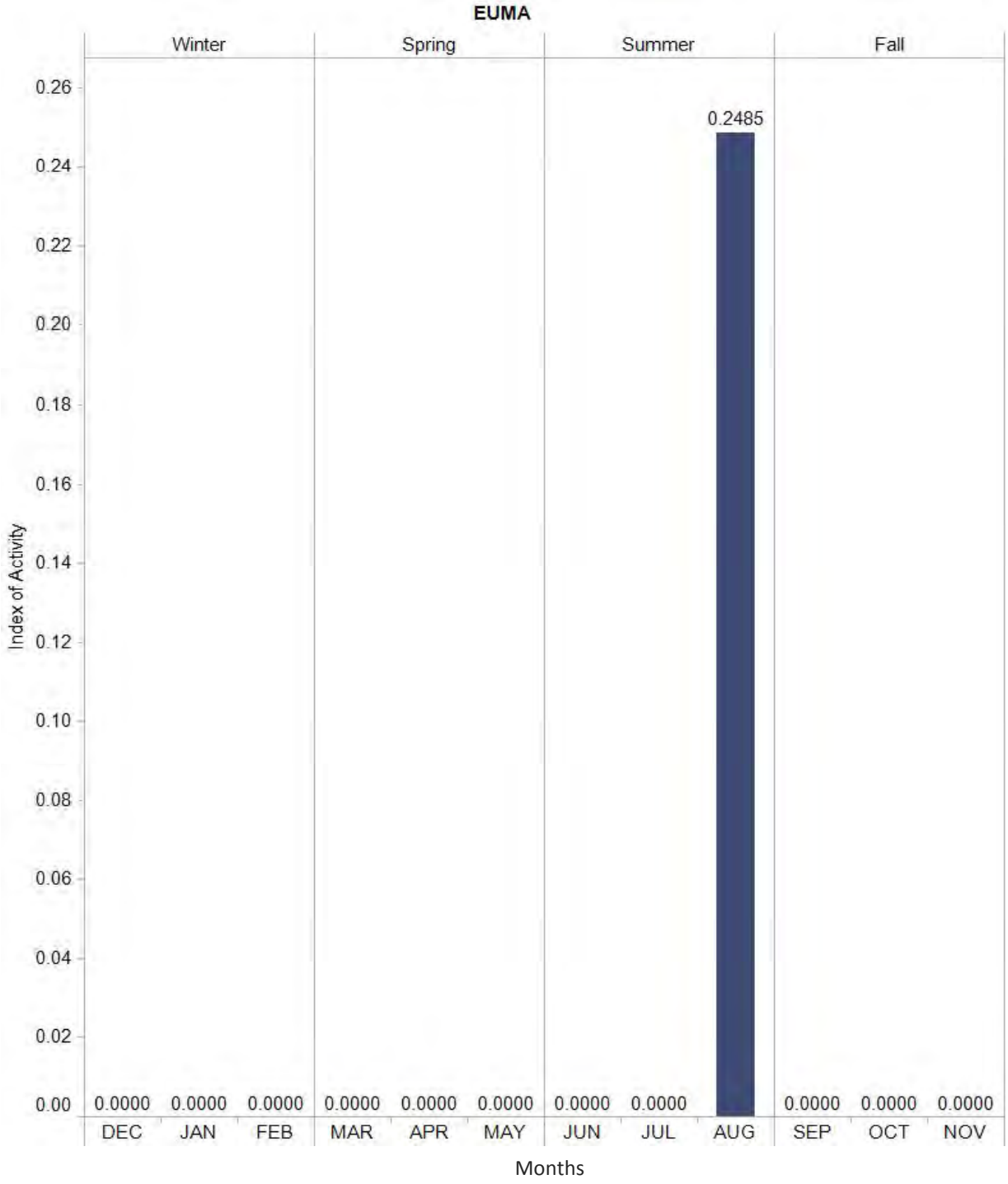


Figure B-7. *Euderma maculatum* activity by month for all years, 2004-2008.

Eumops perotis californicus

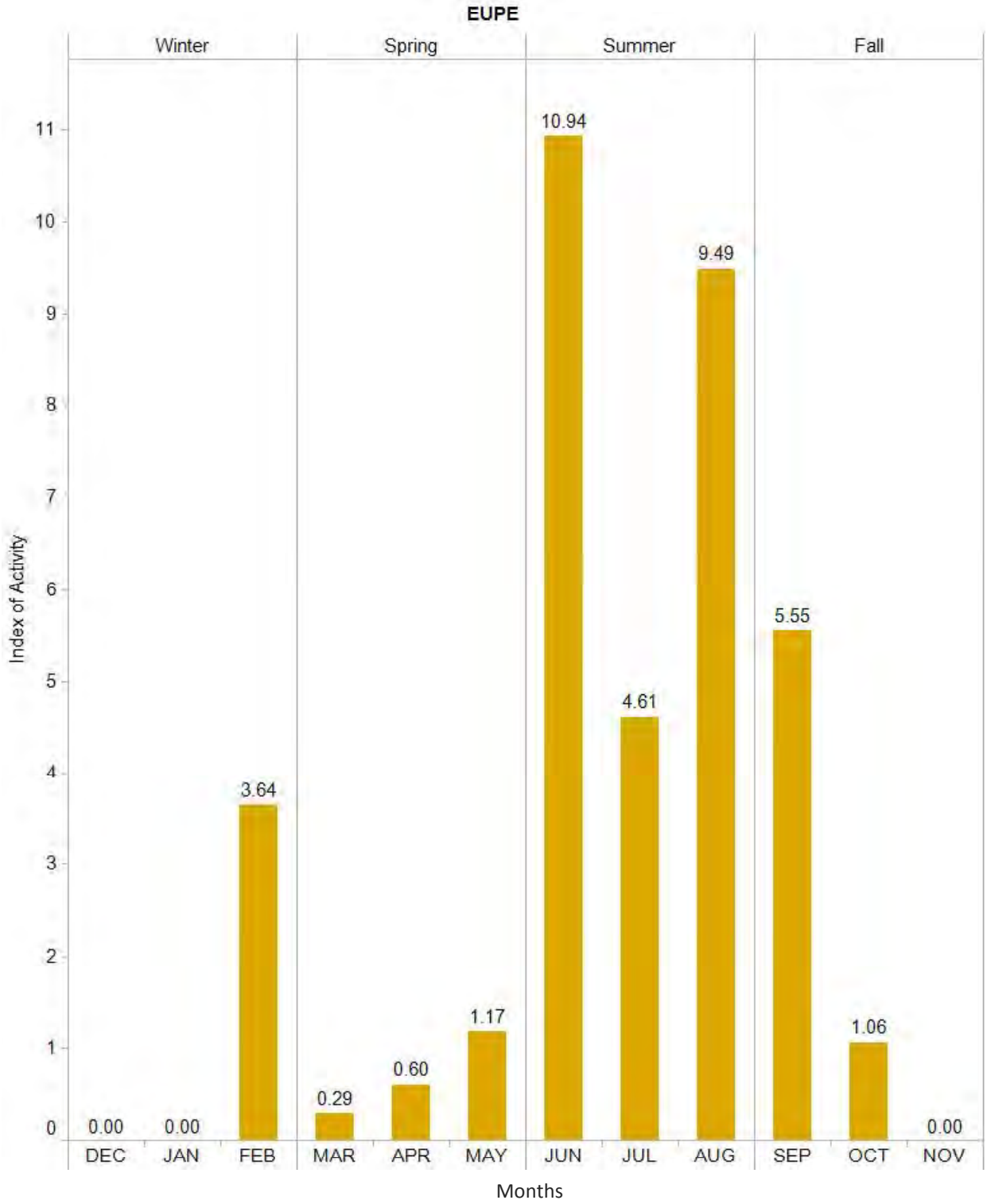


Figure B-8. *Eumops perotis californicus* activity by month for all years, 2004-2008.

Idionycteris phyllotis

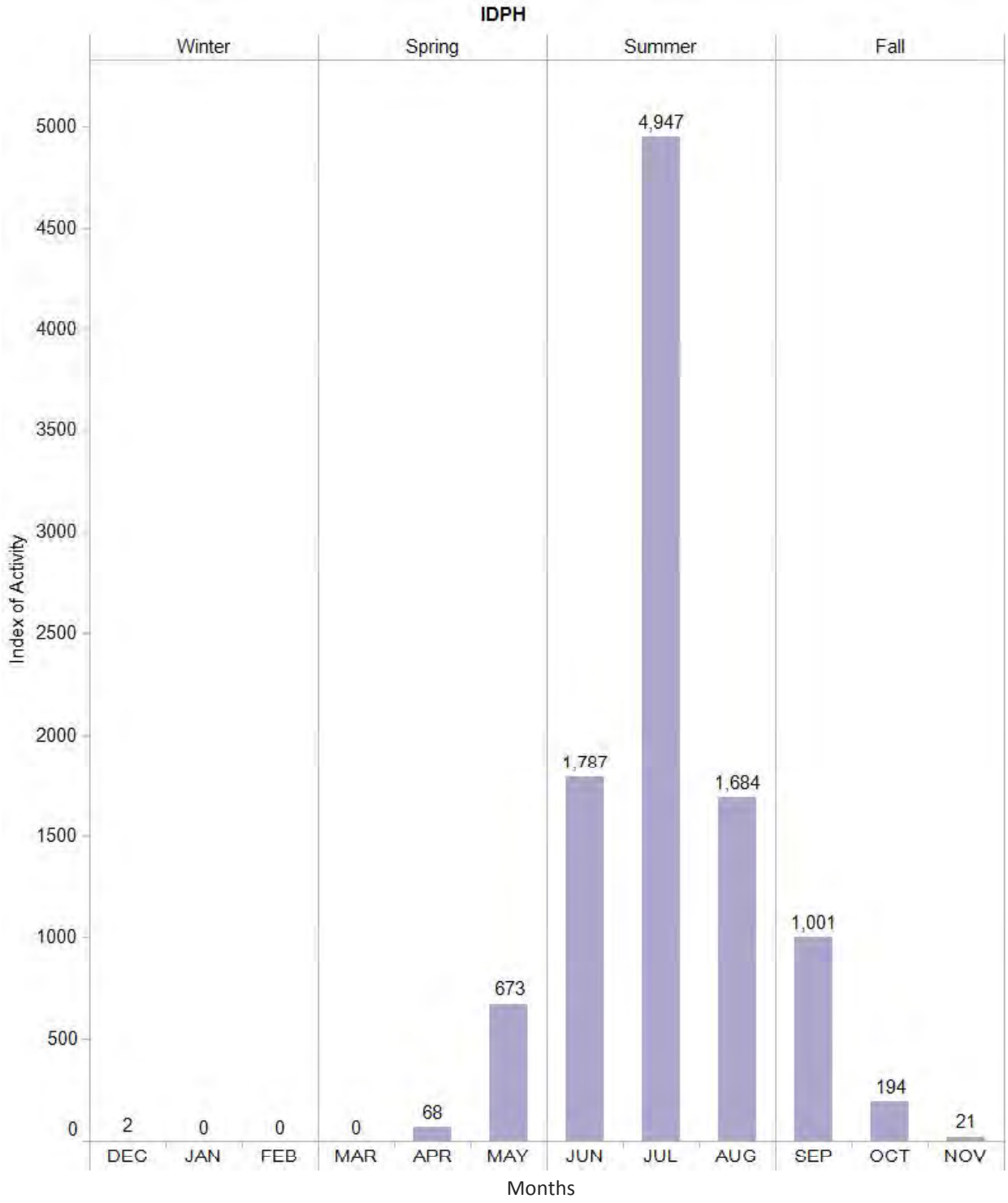


Figure B-9. *Idionycteris phyllotis* activity by month for all years, 2004-2008.

Lasiurus blossevillii

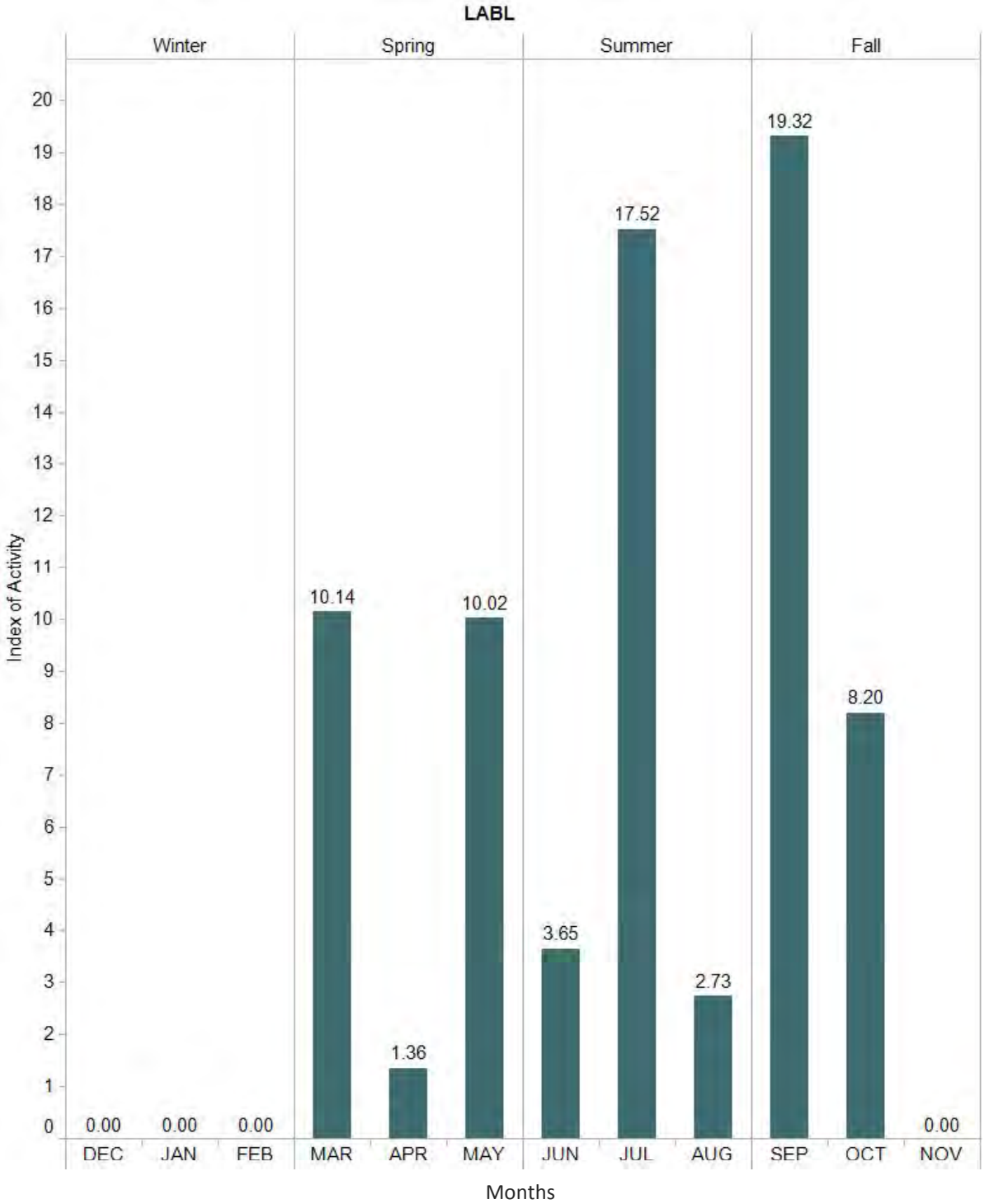


Figure B-10. *Lasiurus blossevillii* activity by month for all years, 2004-2008.

Lasiurus cinereus

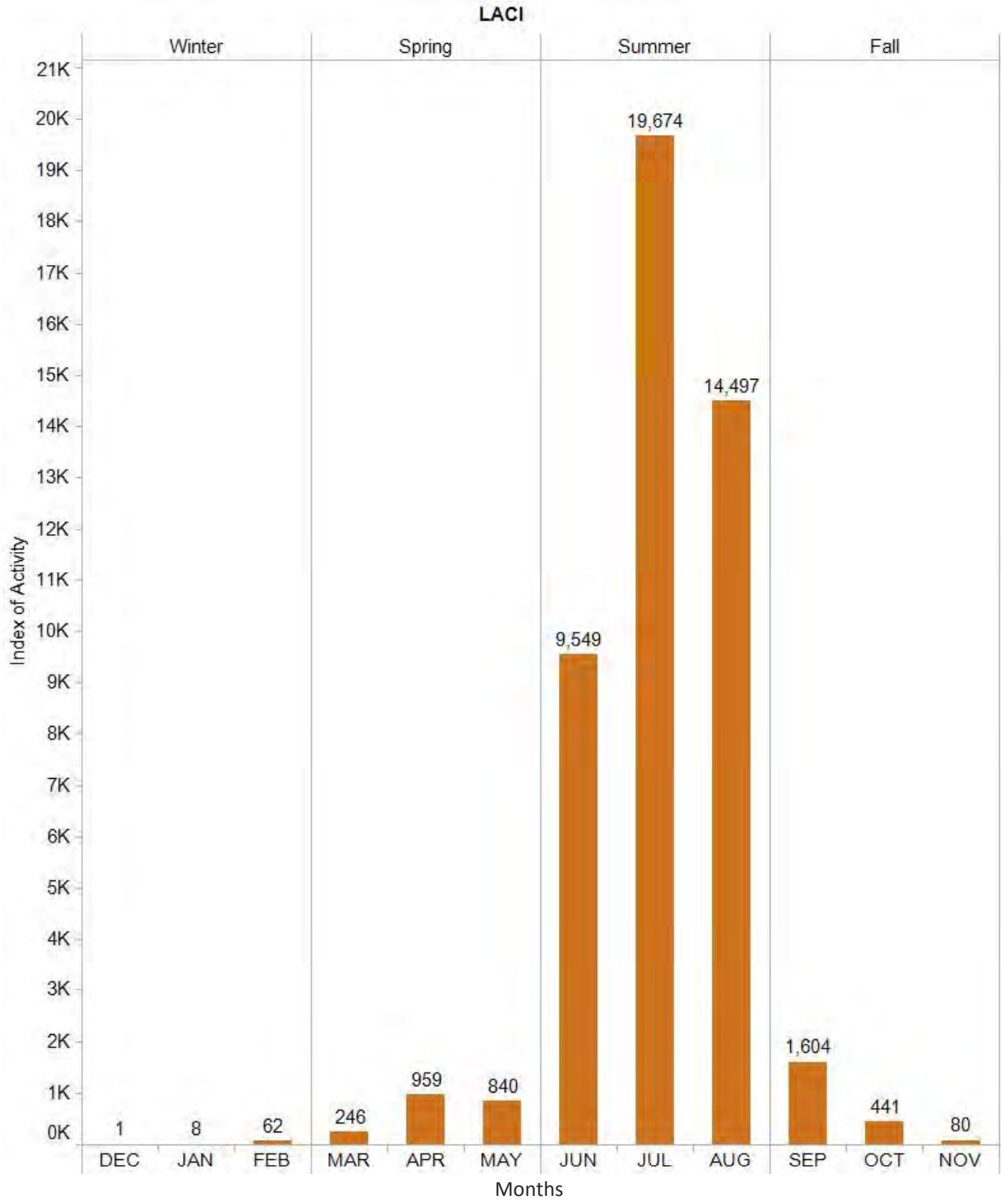


Figure B-11. *Lasiurus cinereus* activity by month for all years, 2004-2008.

Lasiurus noctivagans

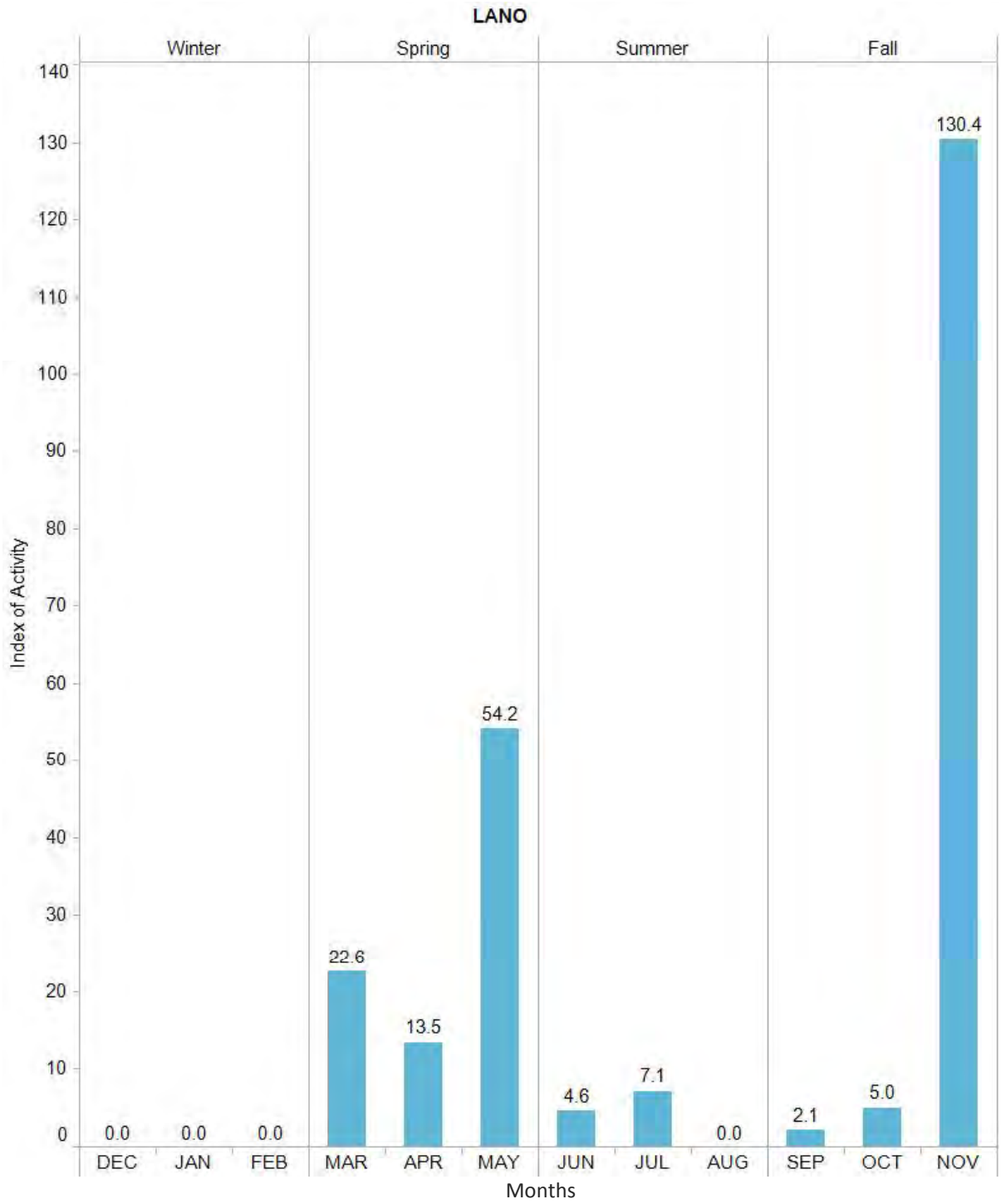


Figure B-12. *Lasiurus noctivagans* activity by month for all years, 2004-2008.

Lasiurus xanthinus

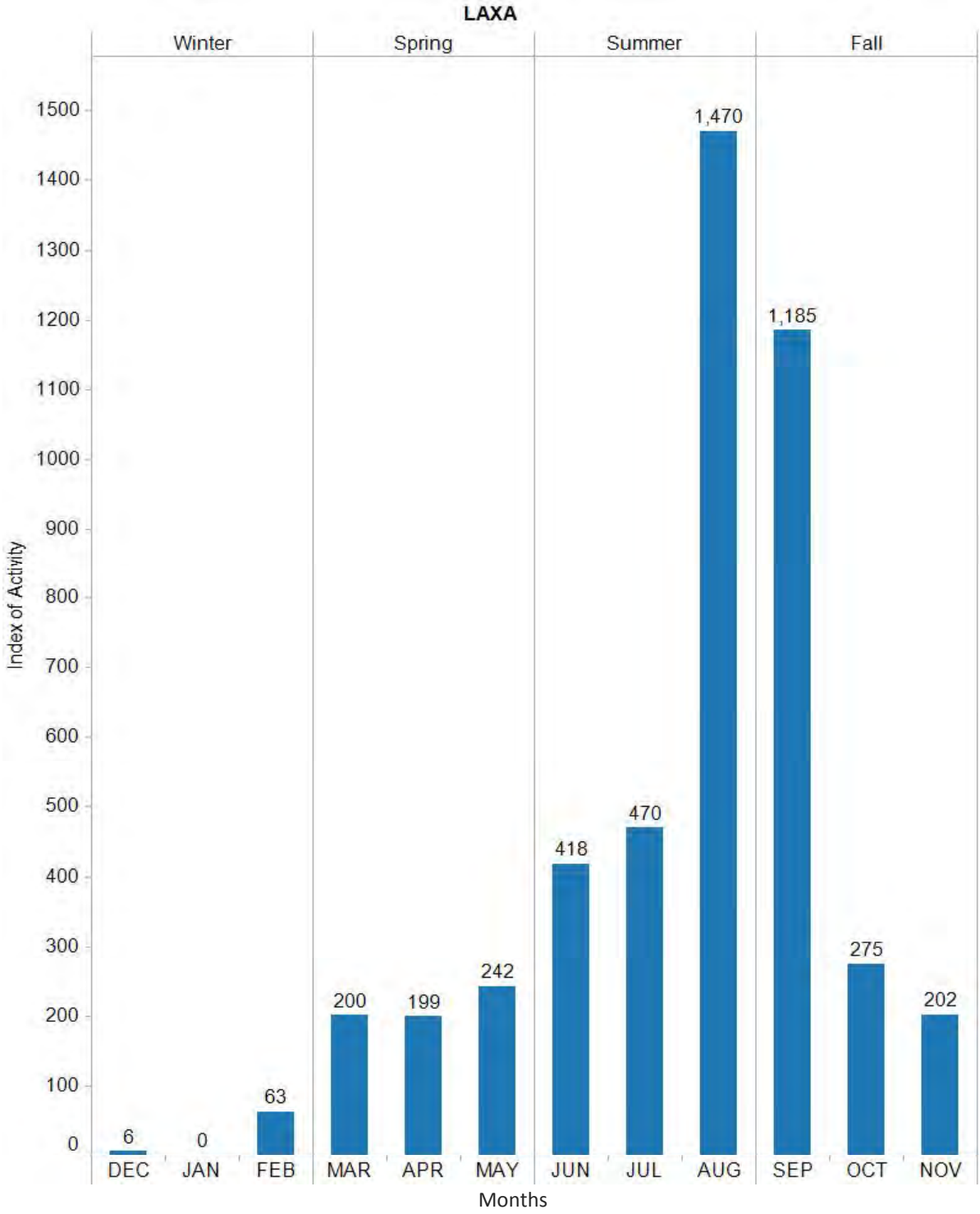


Figure B-13. *Lasiurus xanthinus* activity by month for all years, 2004-2008.

Macrotus californicus

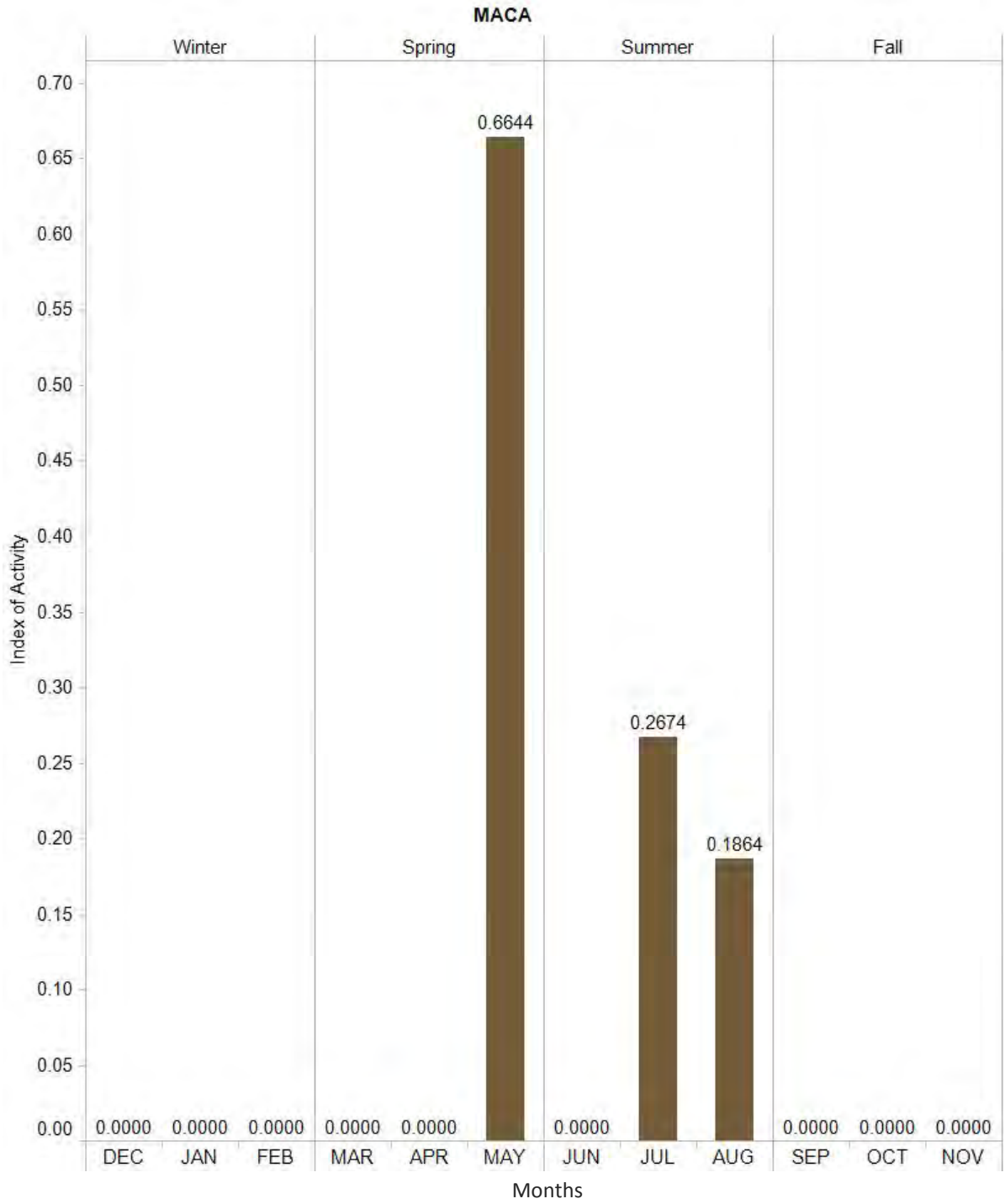


Figure B-14. *Macrotus californicus* activity by month for all years, 2004-2008.

Myotis californicus

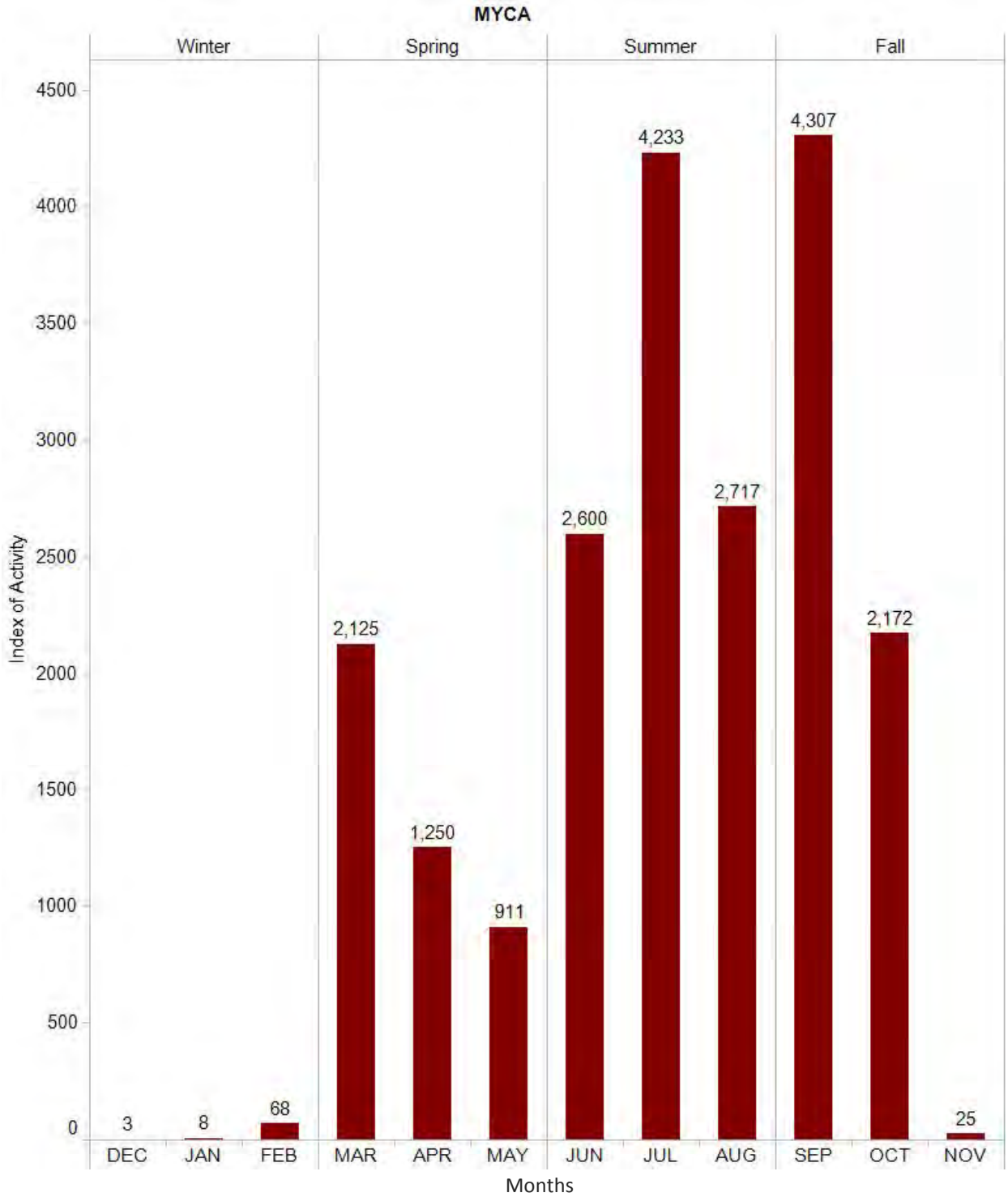


Figure B-15. *Myotis californicus* activity by month for all years, 2004-2008.

Myotis ciliolabrum

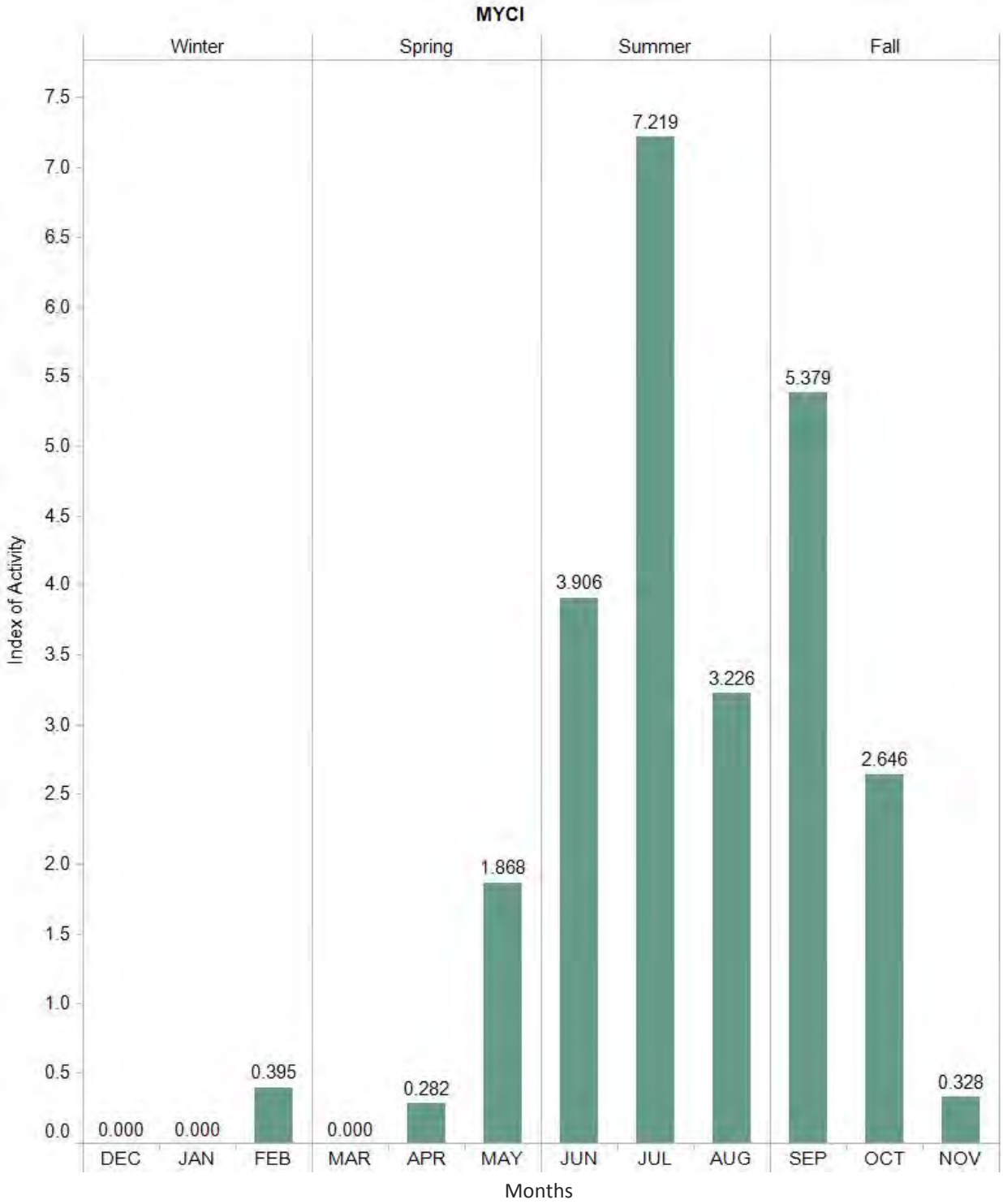


Figure B-16. *Myotis ciliolabrum* activity by month for all years, 2004-2008.

Myotis thysanodes

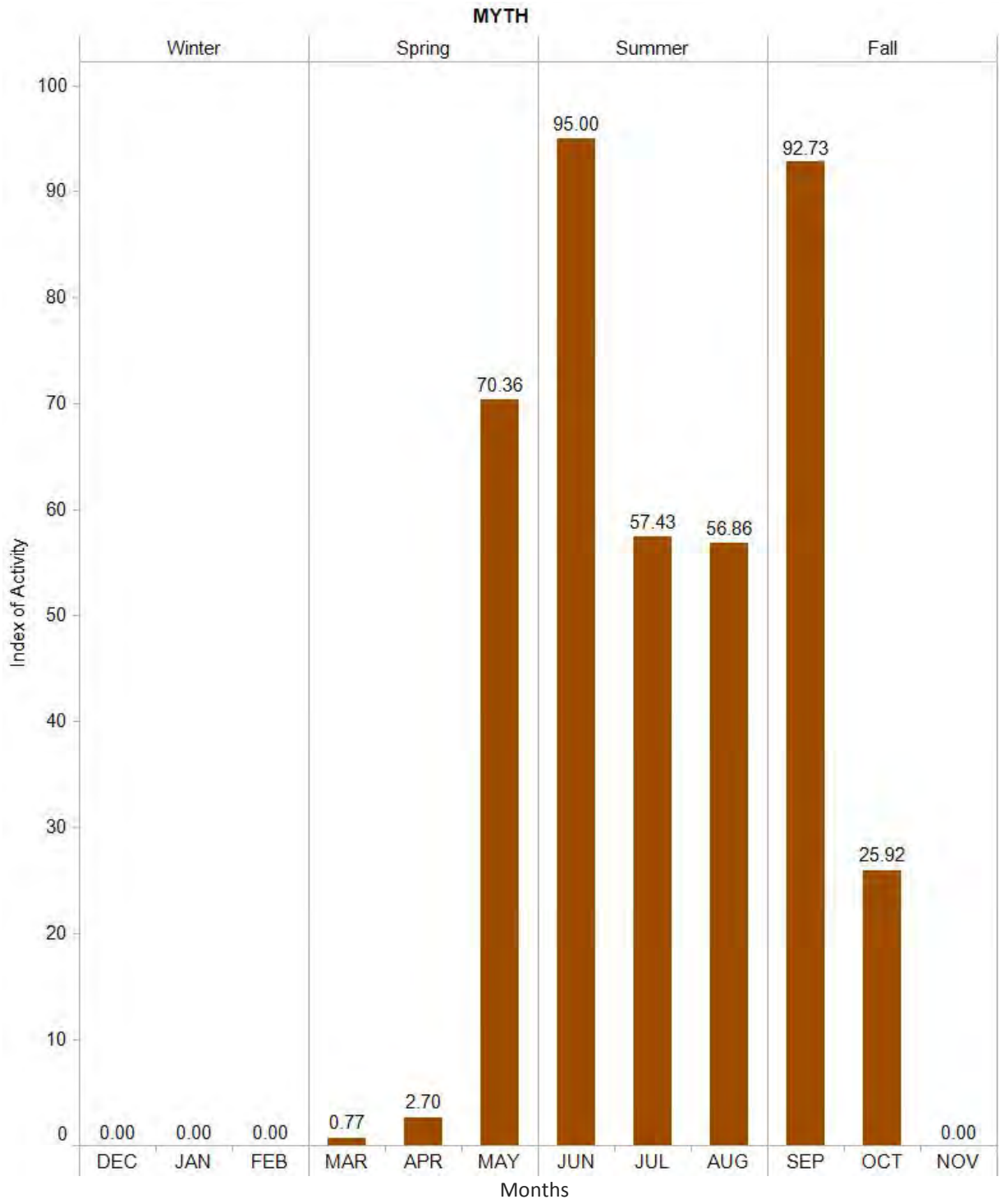


Figure B-17. *Myotis thysanodes* activity by month for all years, 2004-2008.

Myotis yumanensis

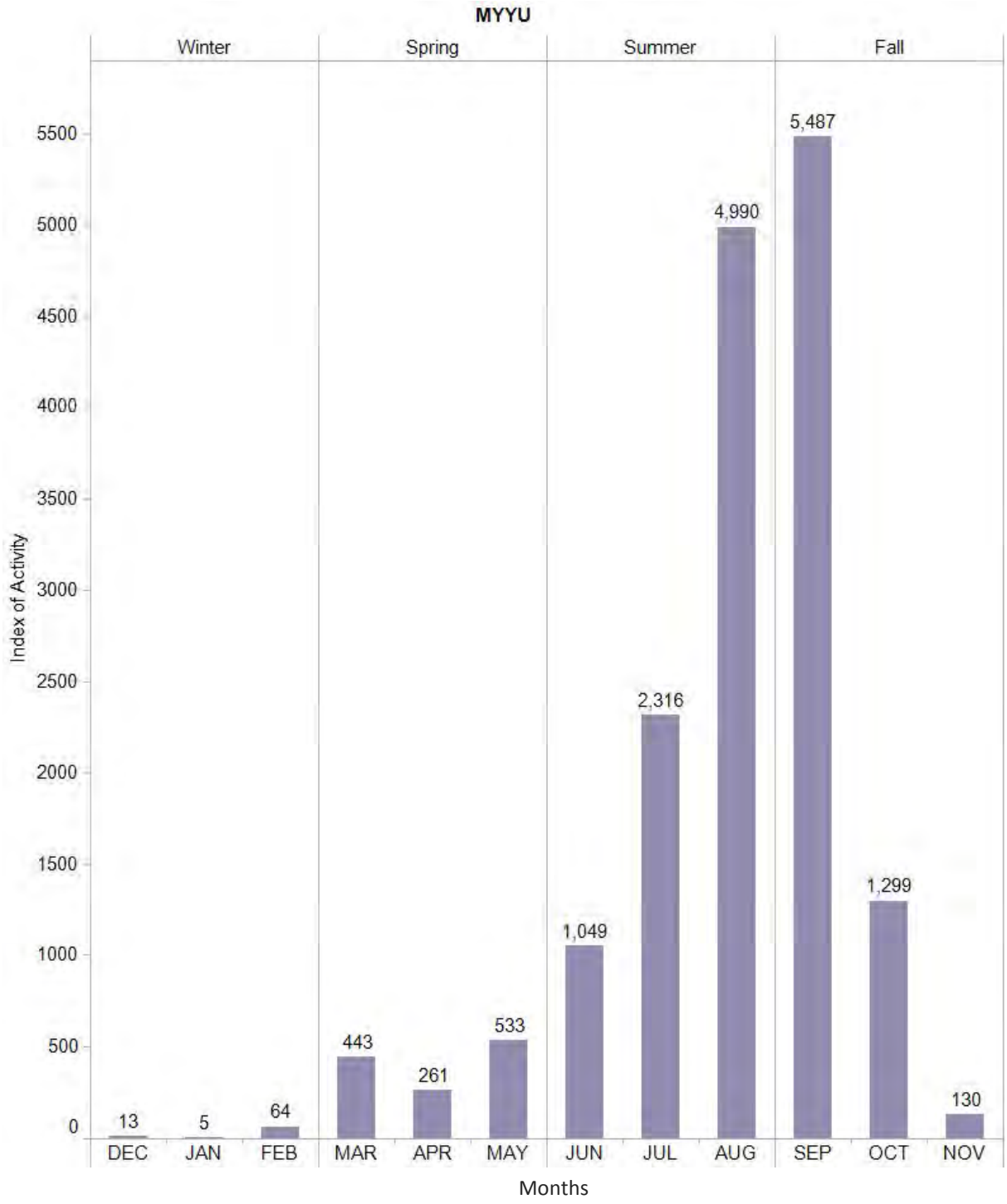


Figure B-18. *Myotis yumanensis* activity by month for all years, 2004-2008.

Nyctinomops macrotus

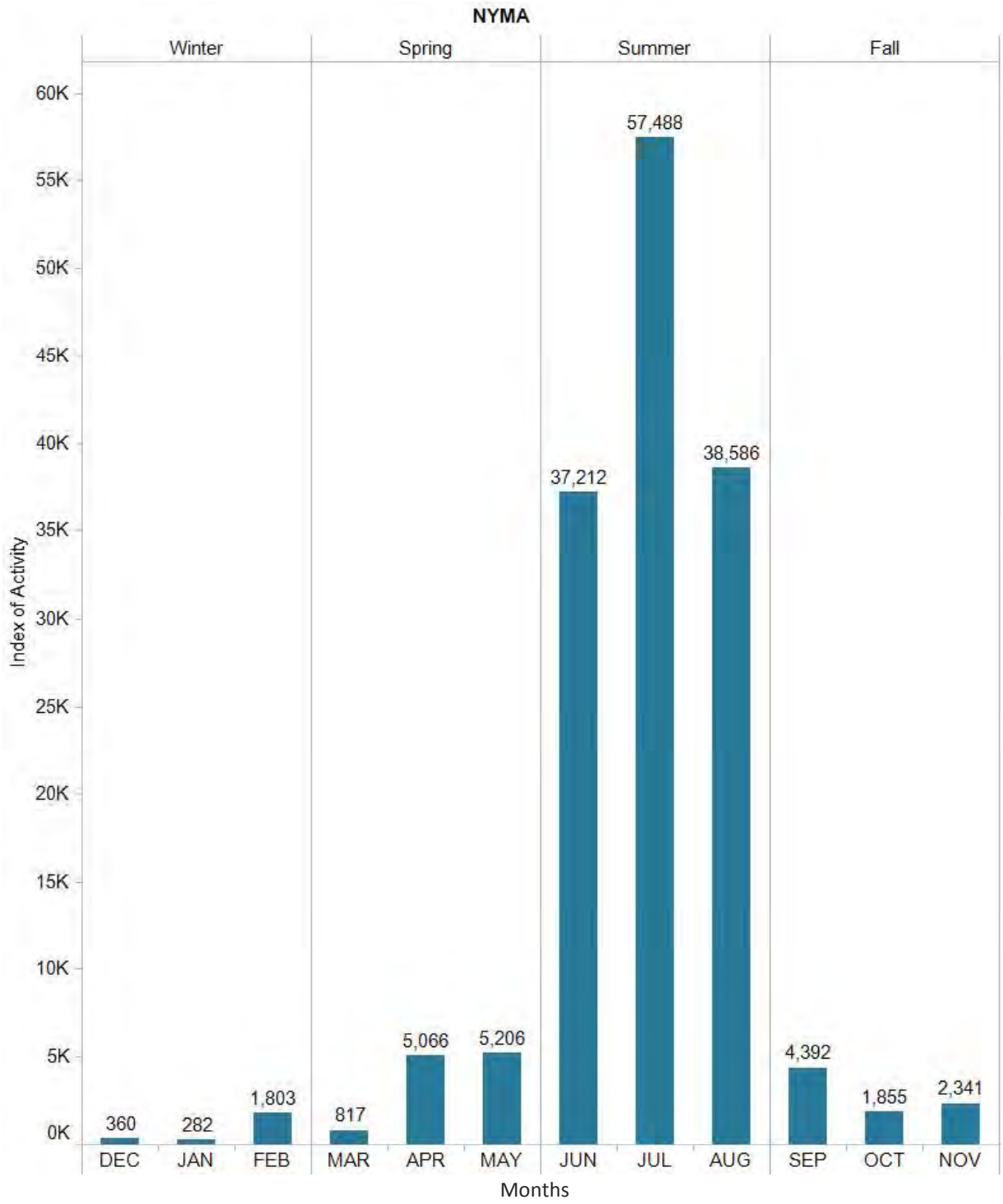


Figure B-19. *Nyctinomops macrotus* activity by month for all years, 2004-2008.

Parastrellus hesperus

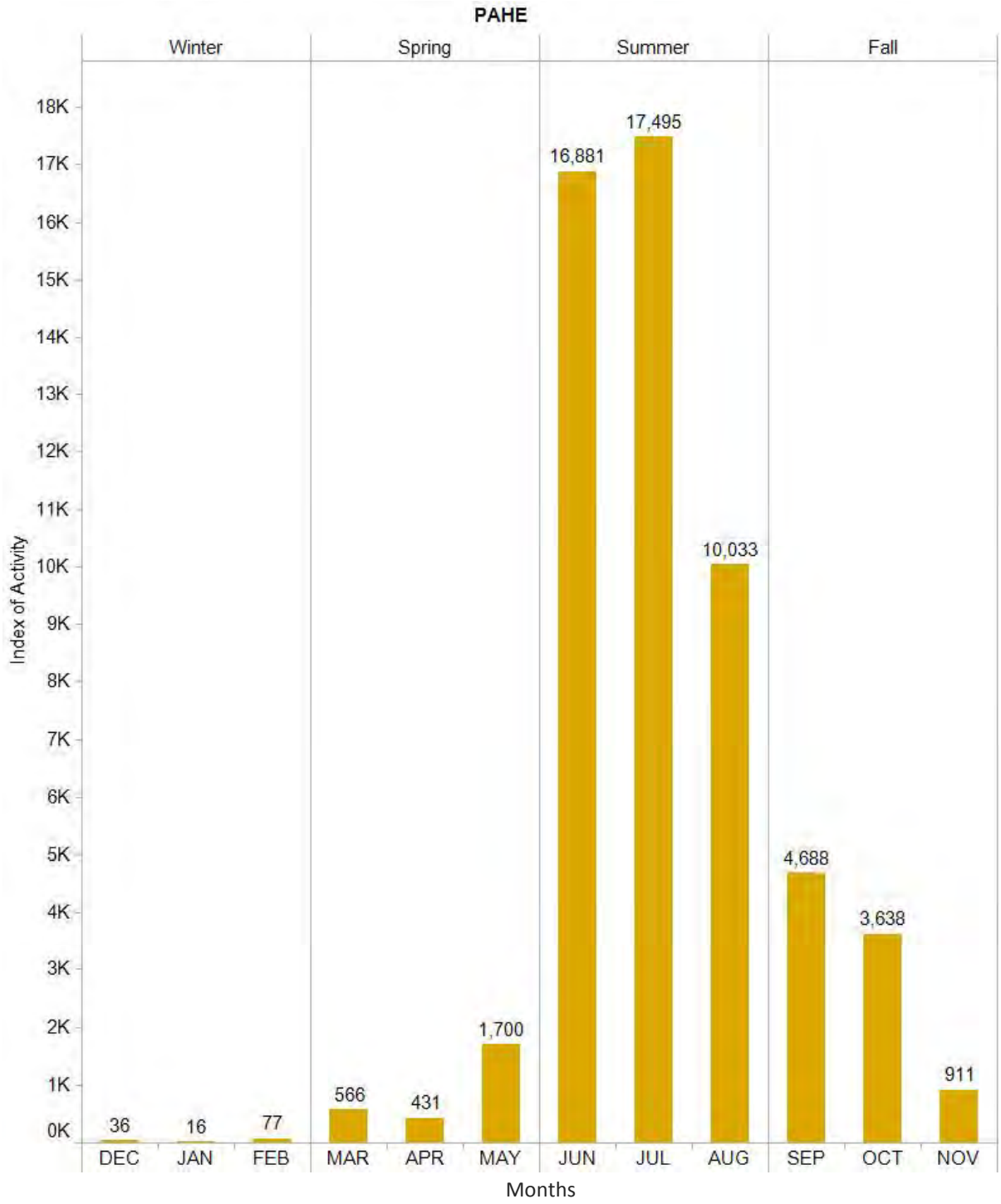


Figure B-20. *Parastrellus hesperus* activity by month for all years, 2004-2008.

Tadarida brasiliensis

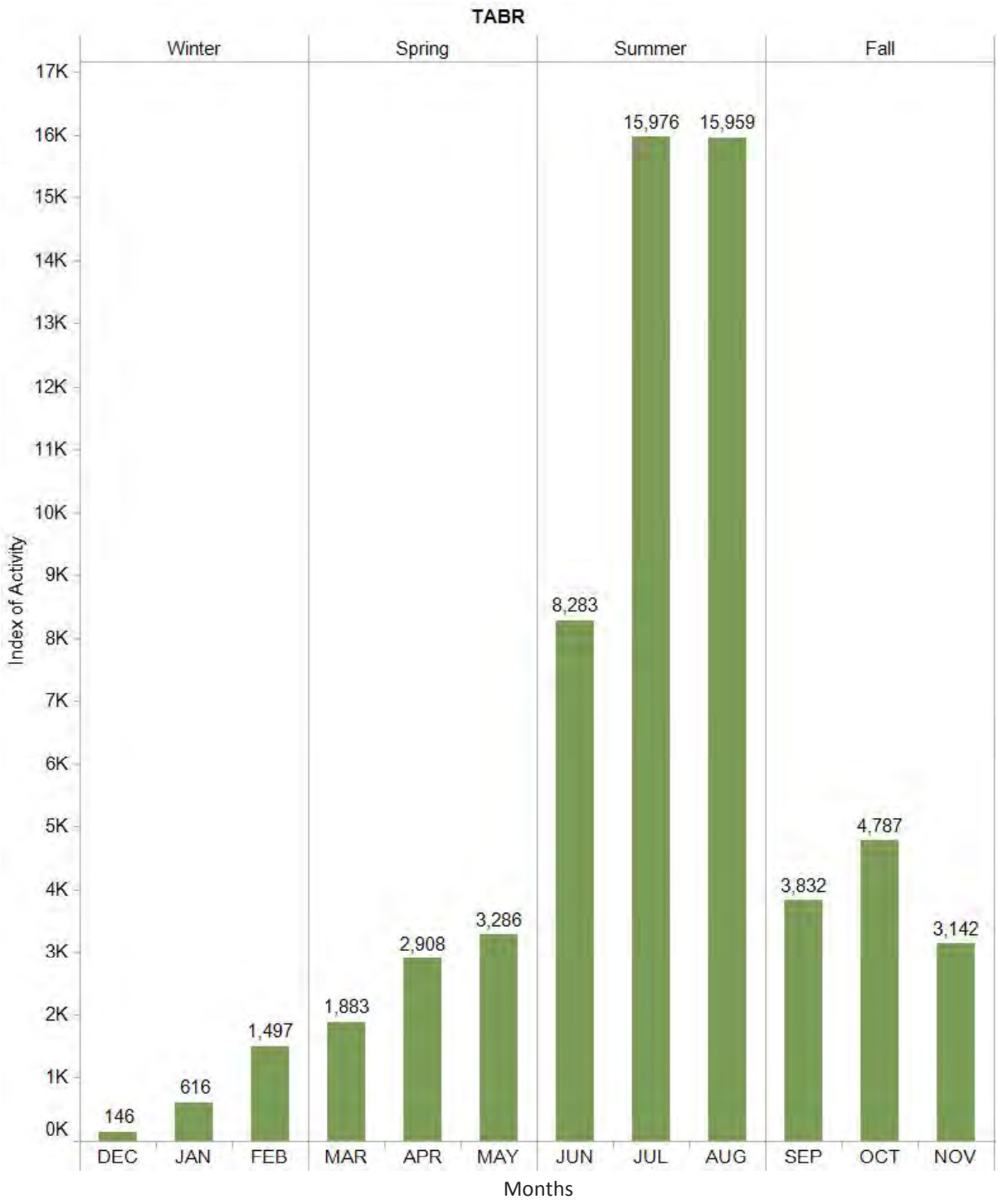


Figure B-21. *Tadarida brasiliensis* activity by month for all years, 2004-2008.

Appendix C

Capture Monitoring Activity

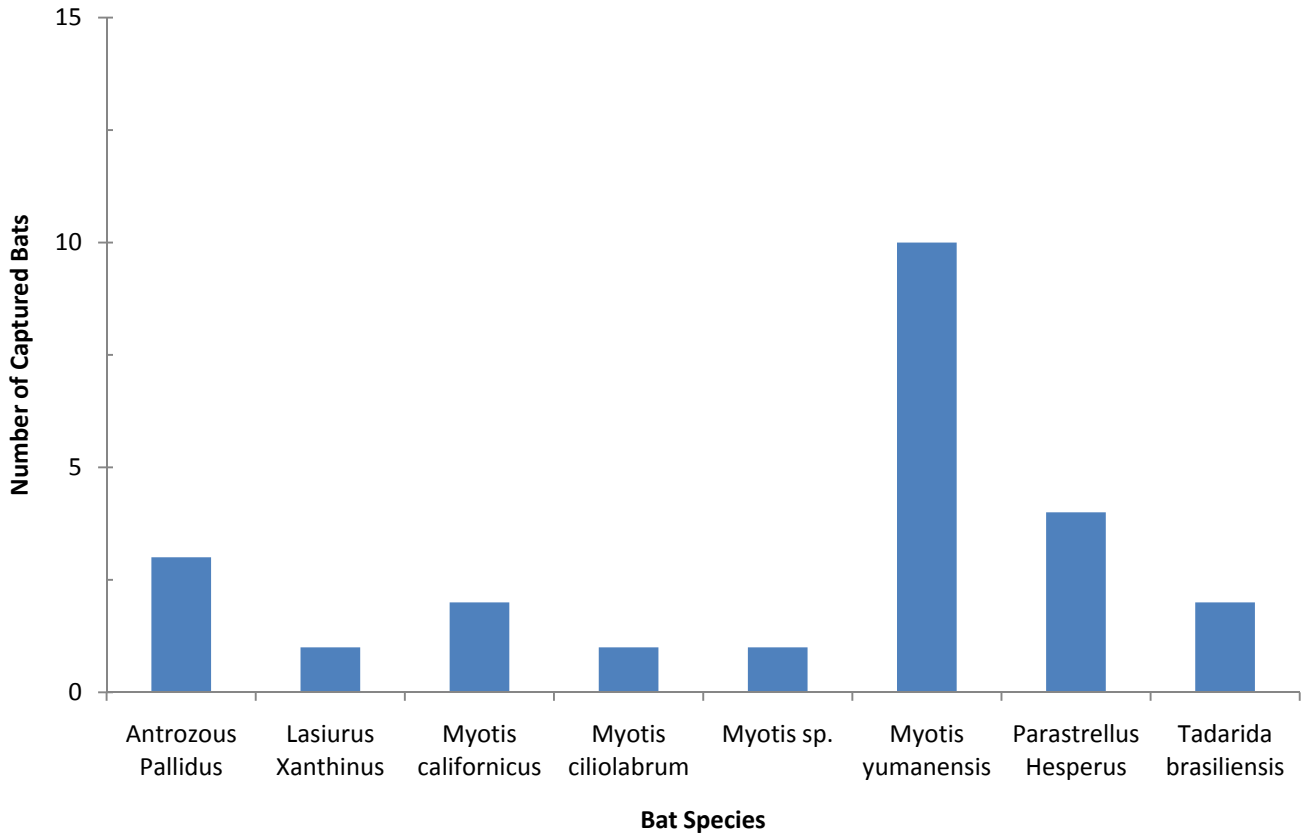


Figure C-1. Nature Preserve species richness and abundance, 2008-2009

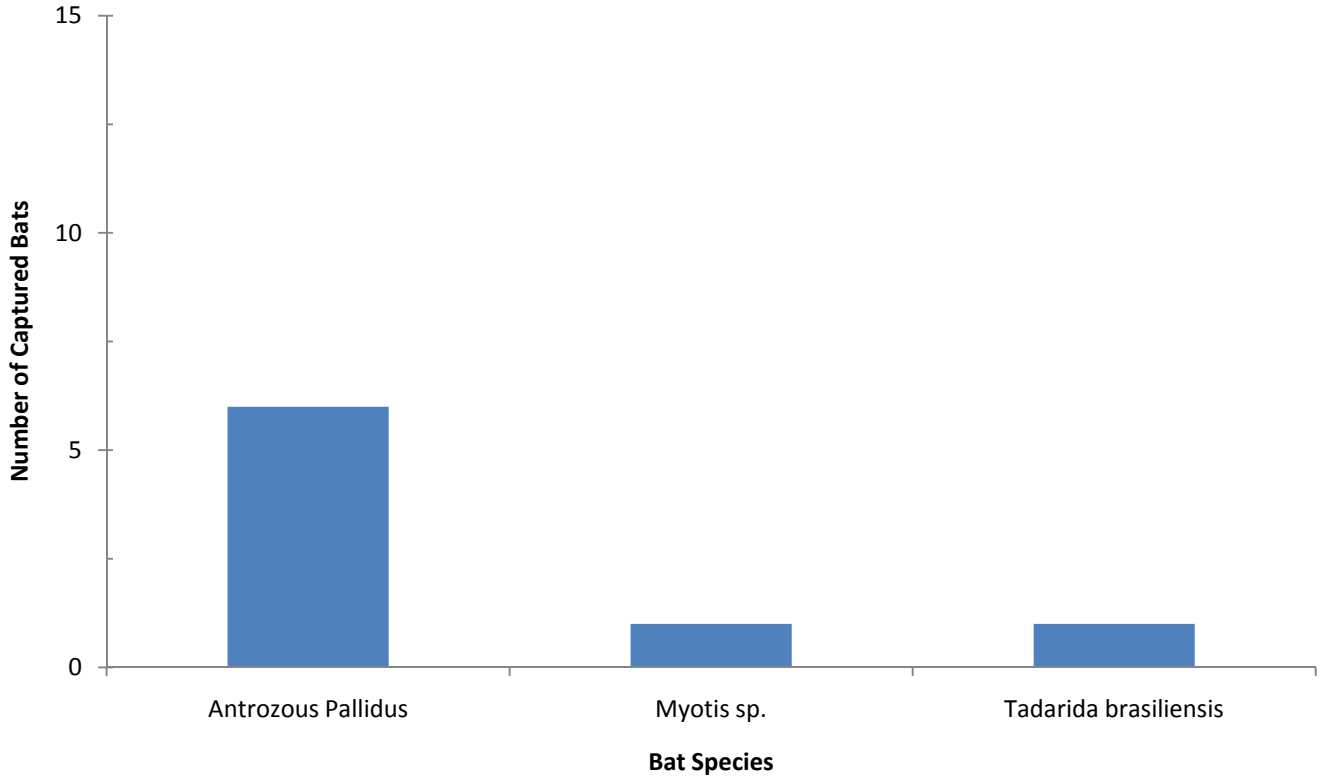


Figure C-2. Cottonwood Cell species richness and abundance, 2008-2009

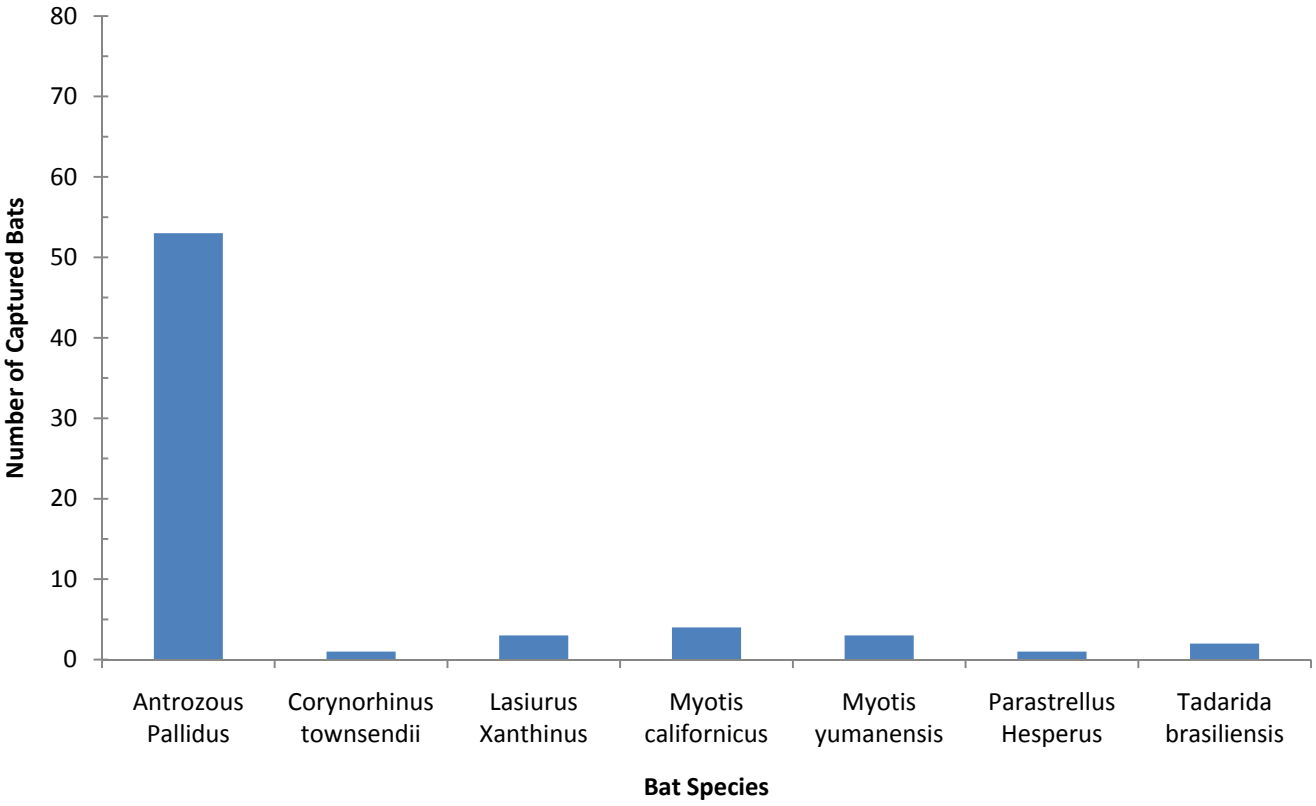


Figure C- 3. Pabco species richness and abundance, 2008-2009

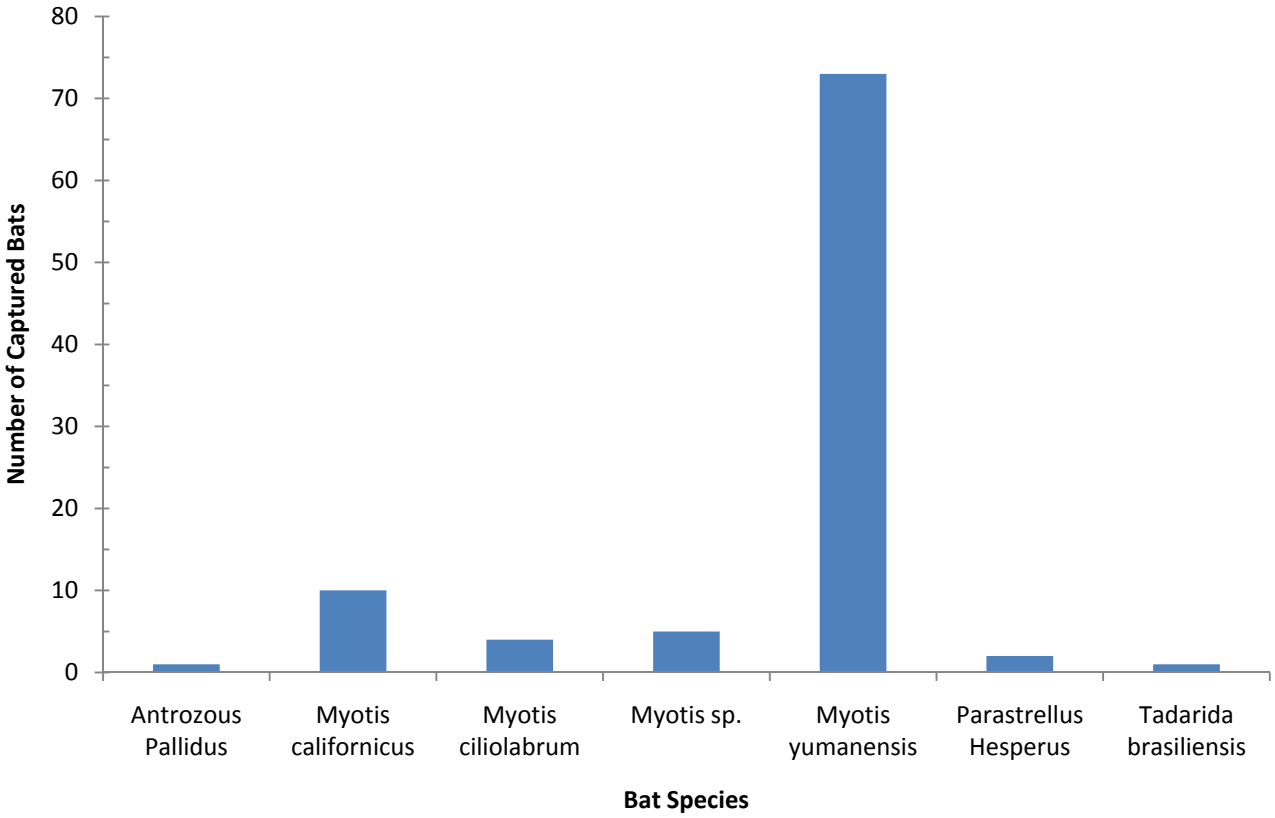


Figure C- 4. Lake Las Vegas Mitigation Wetland species richness and abundance 2008-2009

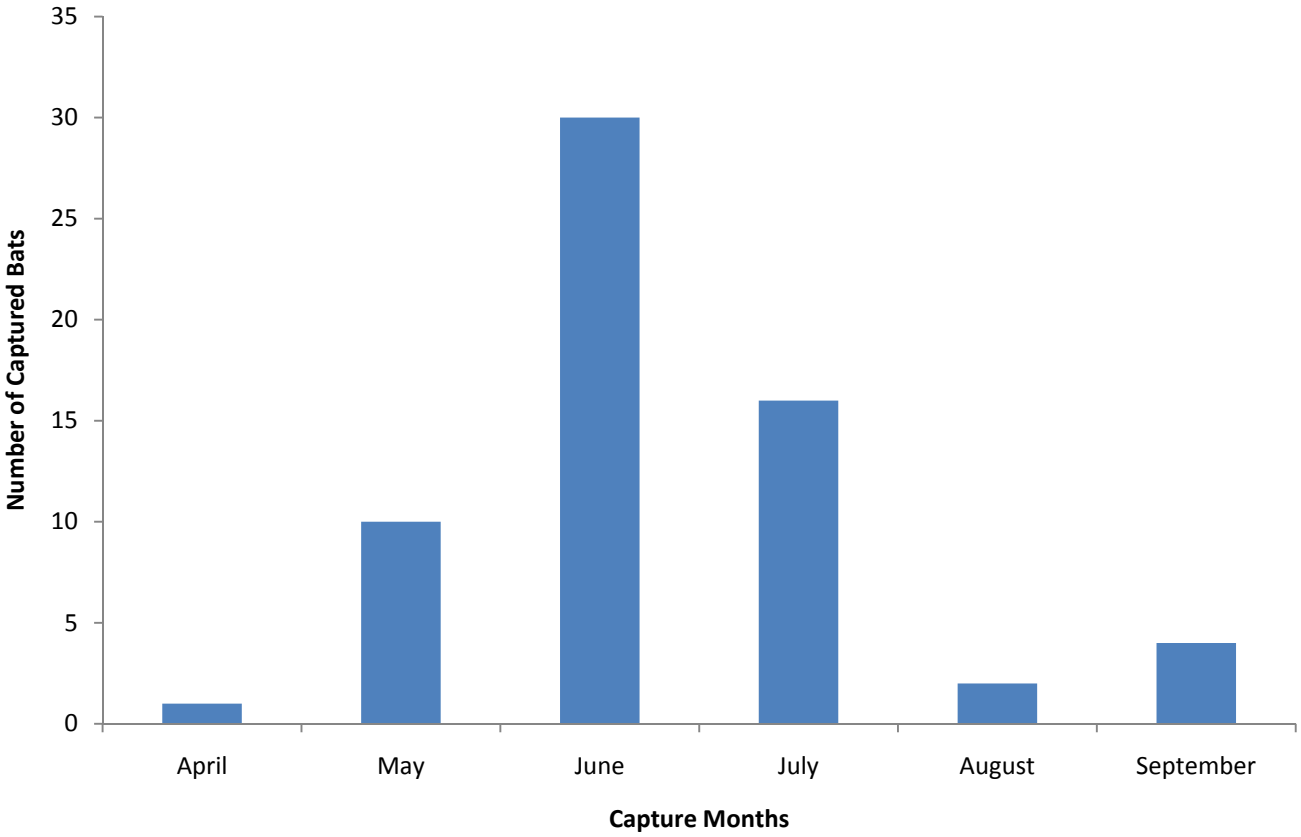


Figure C- 5. *Antrozous pallidus* captures by month, all capture sites in the Las Vegas Wash , 2008-2009

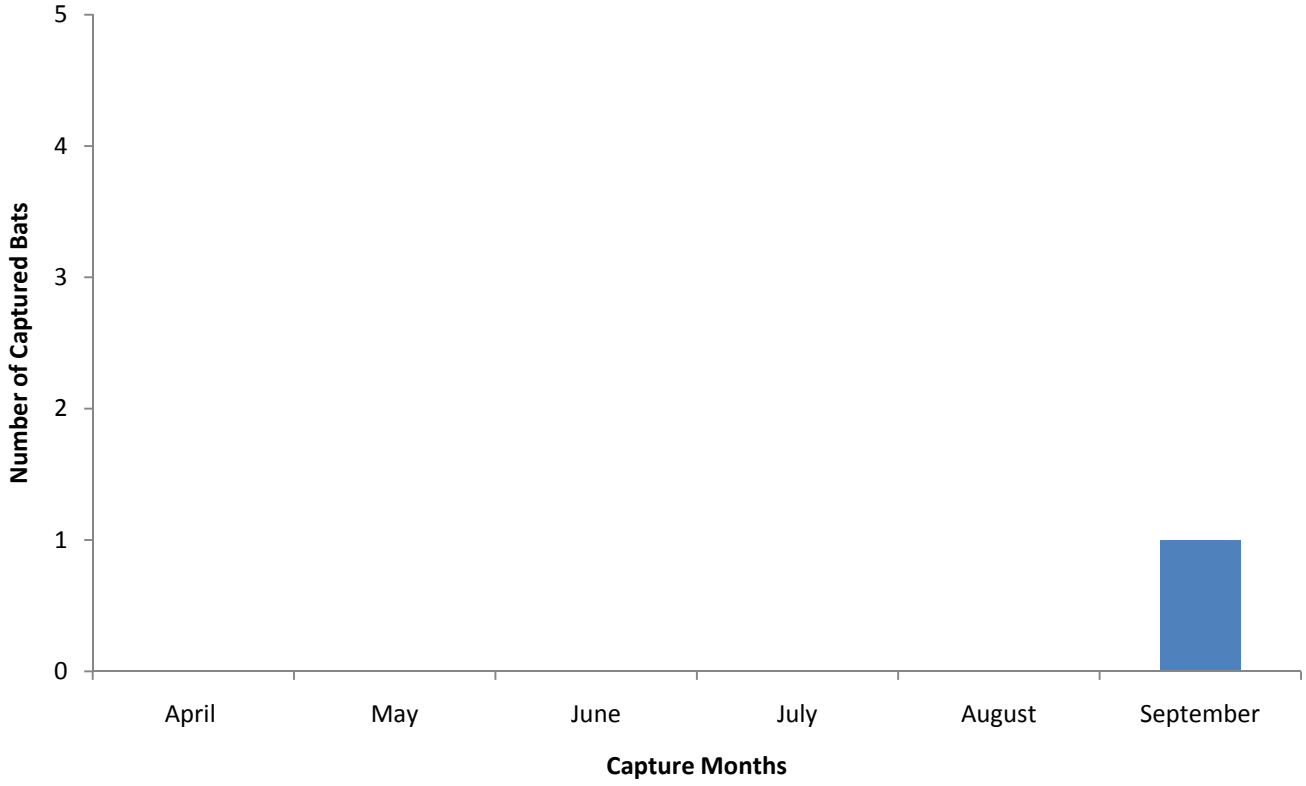


Figure C- 6. *Corynorhinus townsendii* captures by month, all capture sites in the Las Vegas Wash , 2008-2009

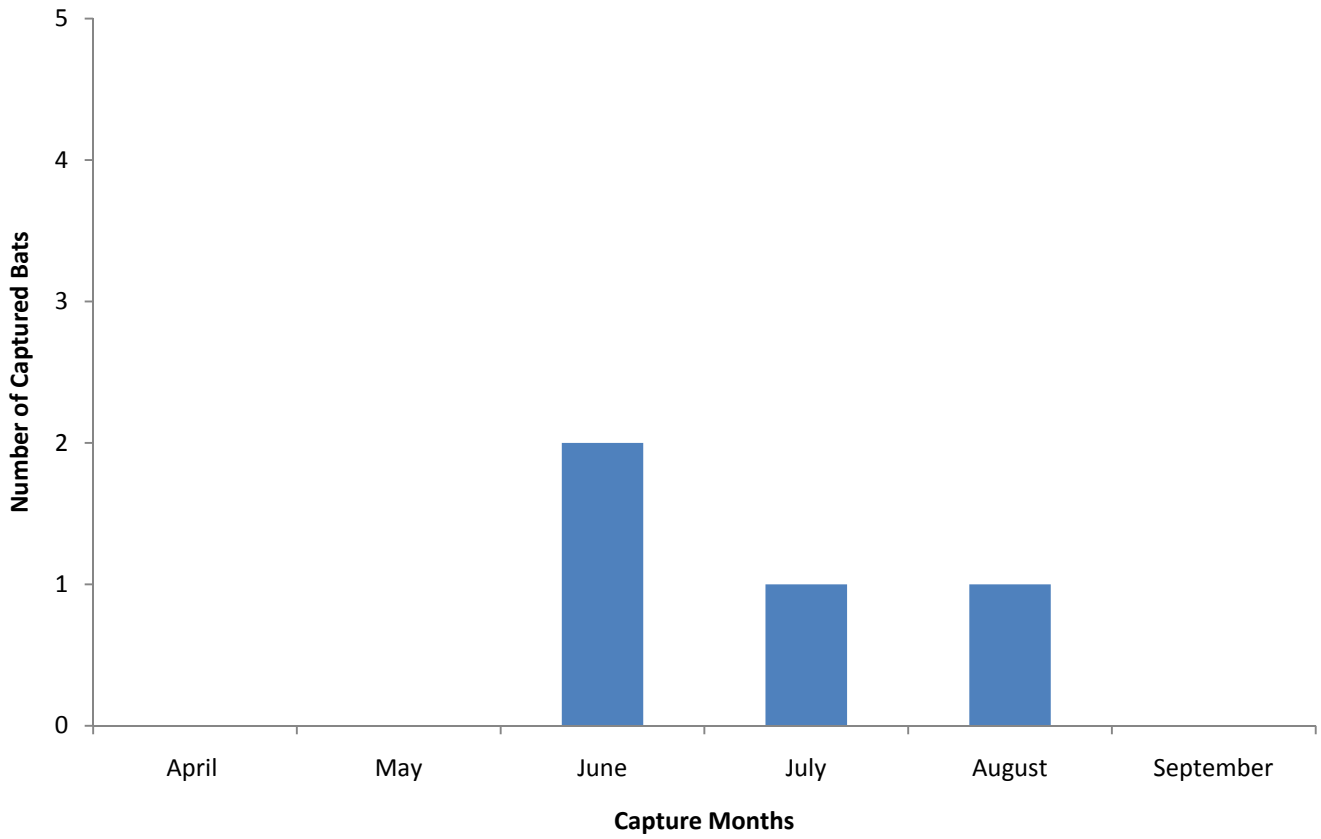


Figure C- 7. *Lasiurus xanthinus* captures by month, all capture sites in the Las Vegas Wash , 2008-2009

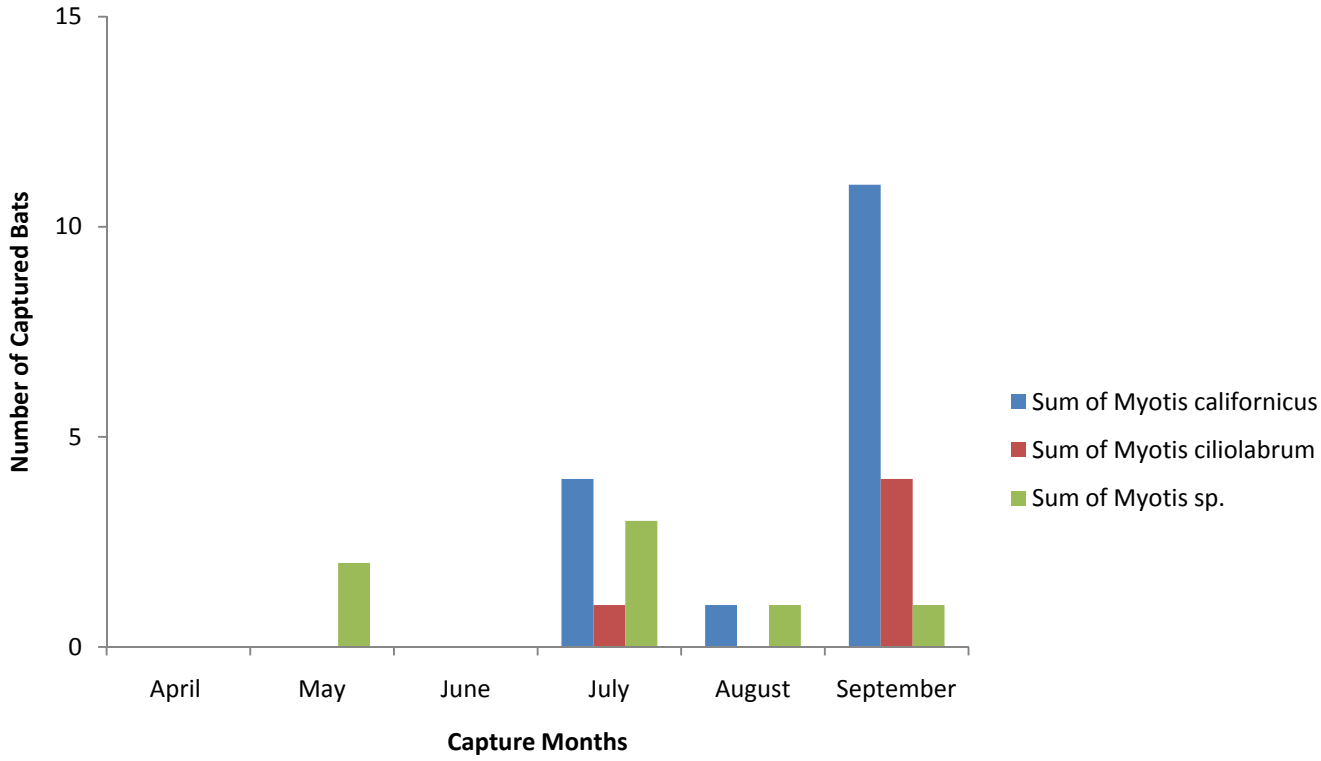


Figure C- 8. *Myotis californicus* and *Myotis ciliolabrum* captures by month, all capture sites in the Las Vegas Wash , 2008-2009

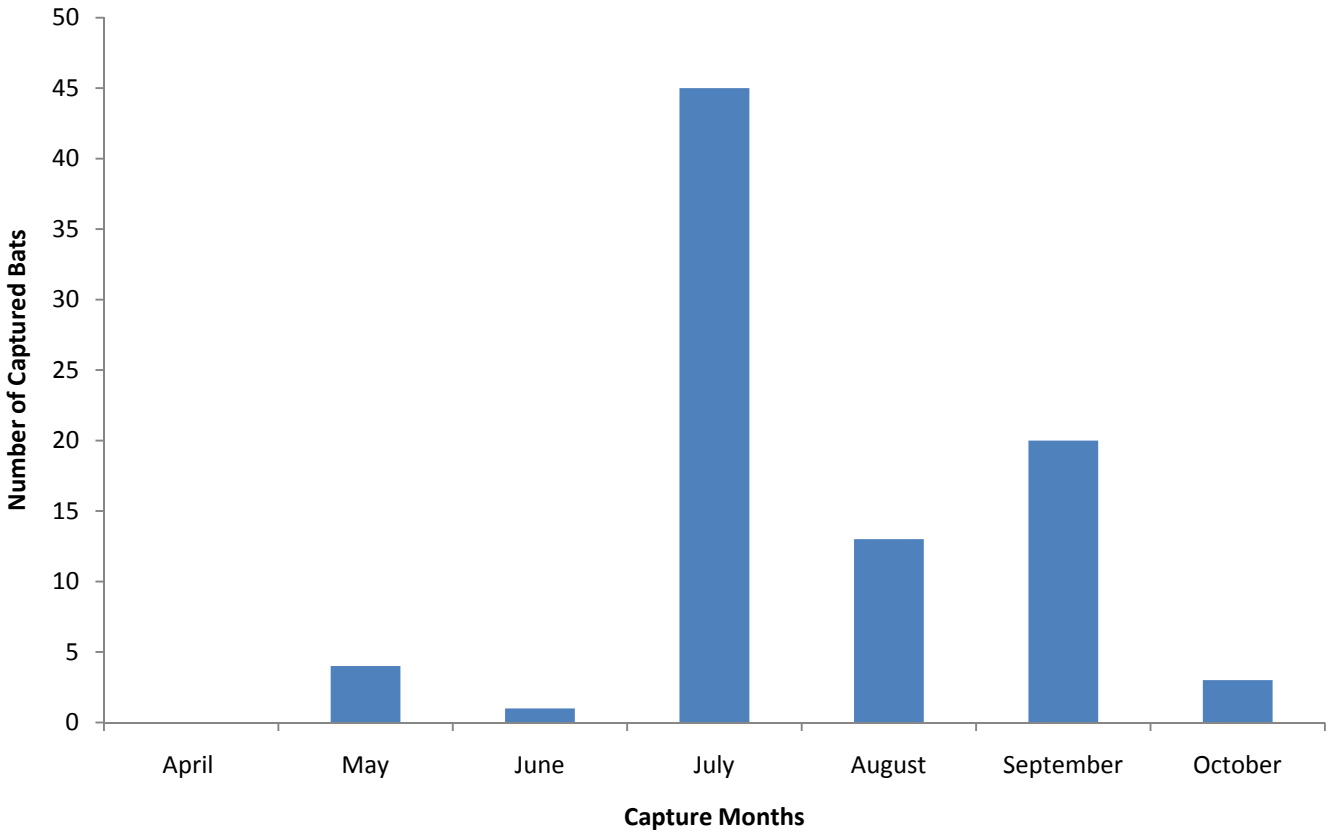


Figure C- 9. *Myotis yumanensis* captures by month, all capture sites in the Las Vegas Wash , 2008-2009

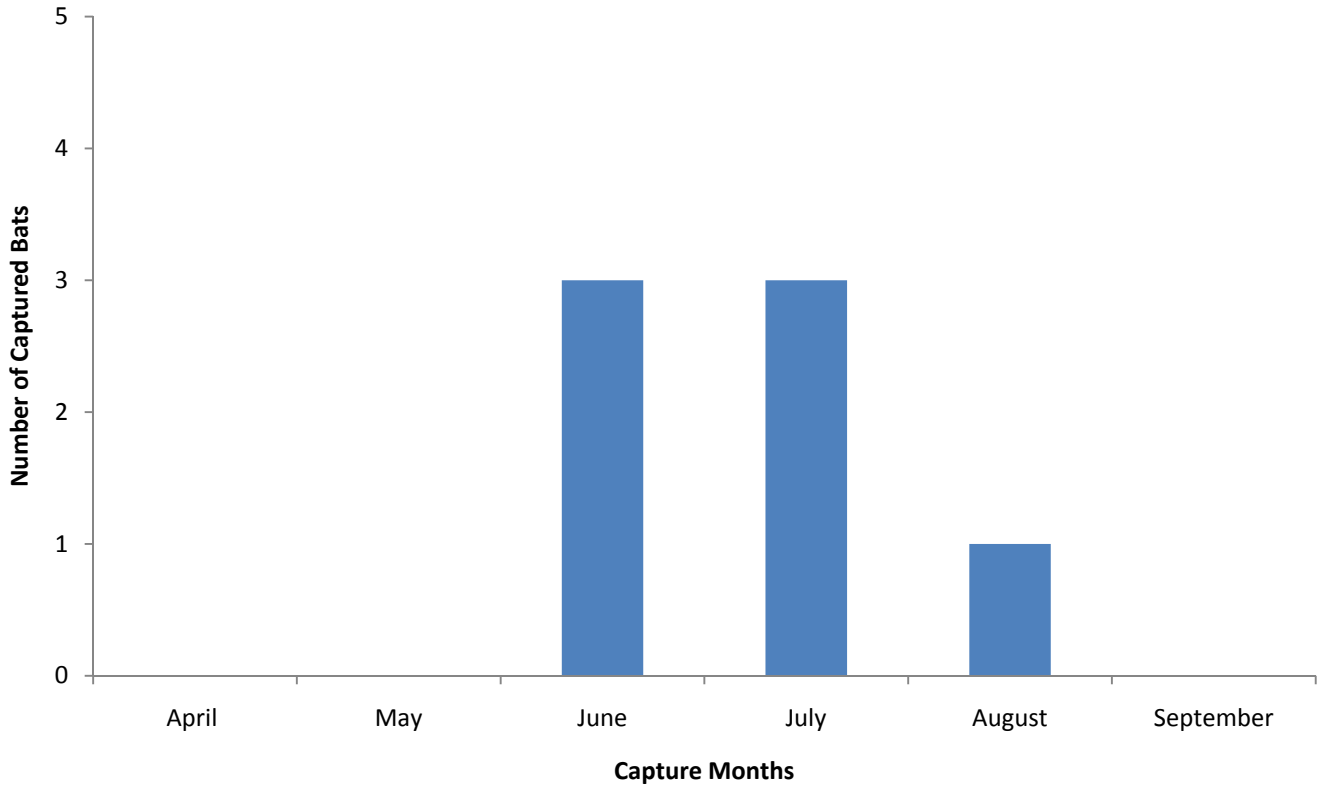


Figure C- 10. *Parastrellus hesperus* captures by month, all capture sites in the Las Vegas Wash , 2008-2009

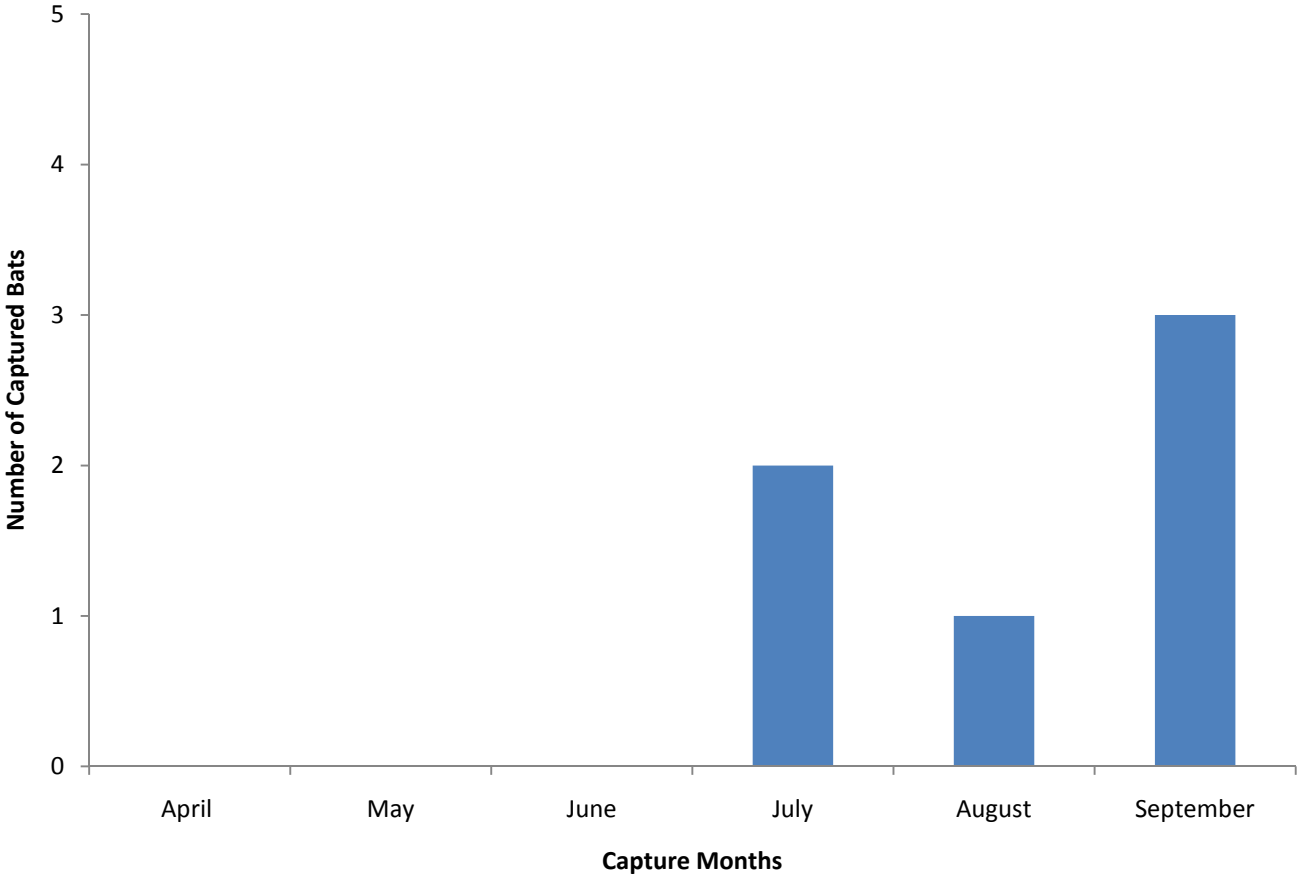
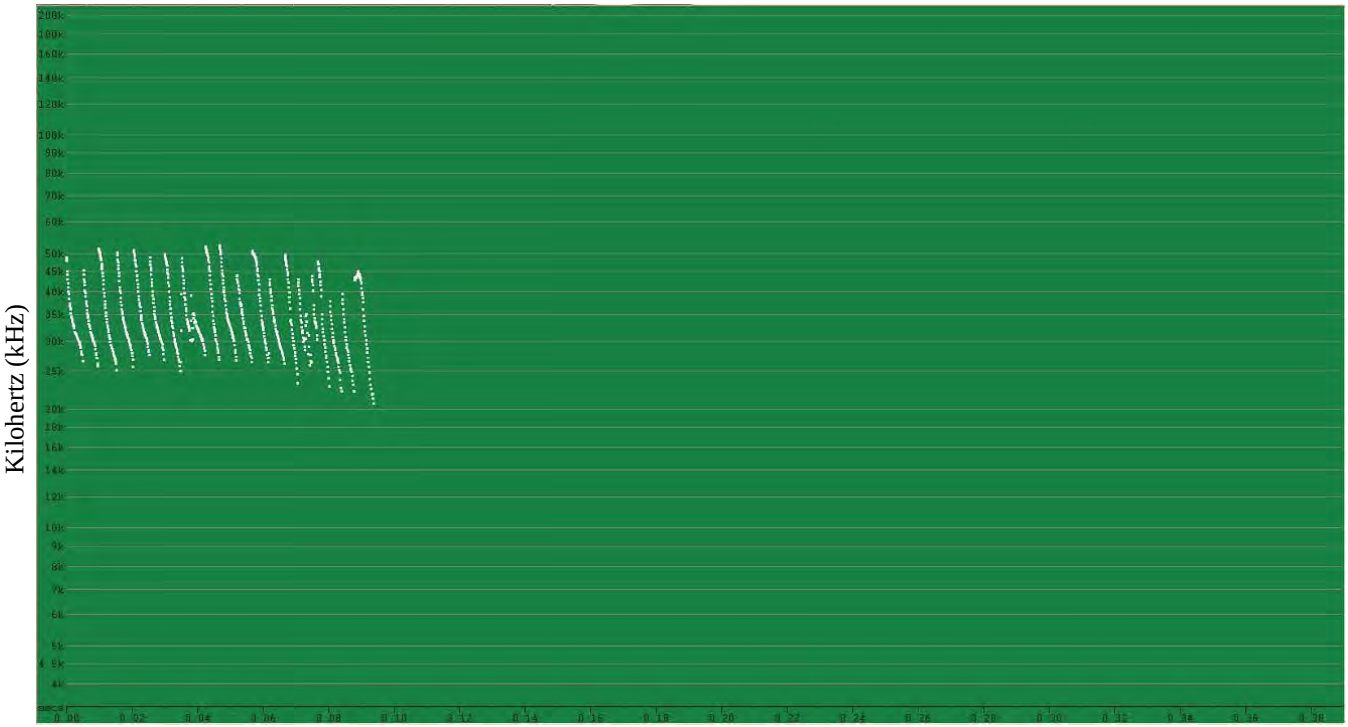


Figure C- 11. *Tadarida brasiliensis* captures by month, all capture sites in the Las Vegas Wash , 2008-2009

Appendix D

Representative Call File Spectrograms



Figured 1. Representative call for *Antrozous pallidus*

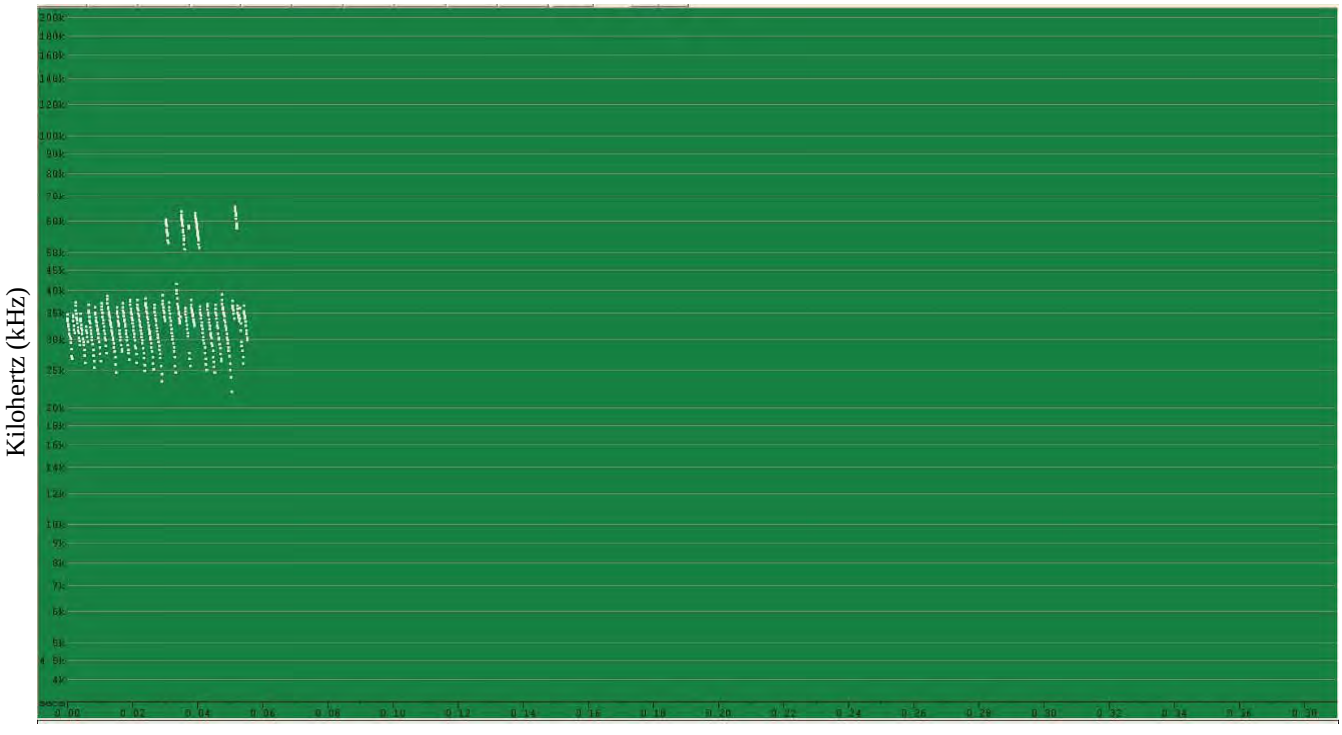


Figure 2. Representative call for *Corynorhinus townsendii*

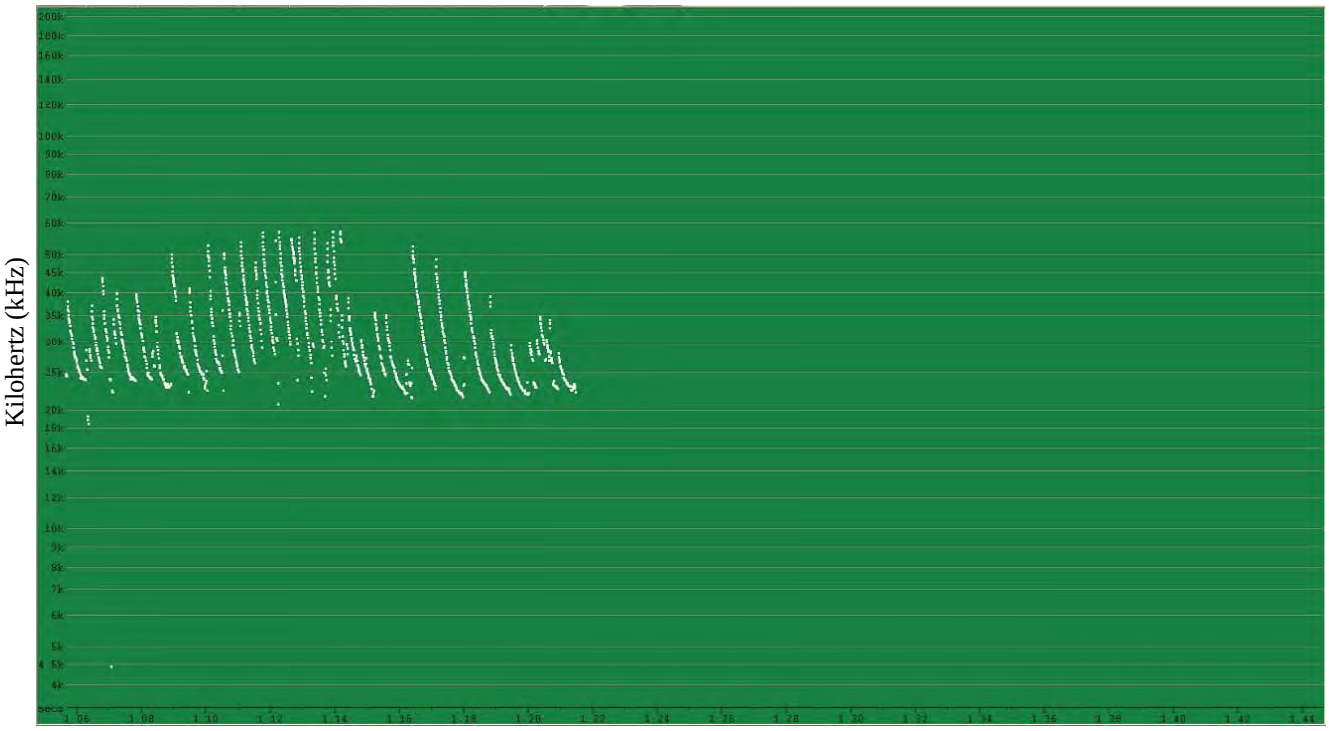


Figure 3. Representative call for *Eptesicus fuscus*

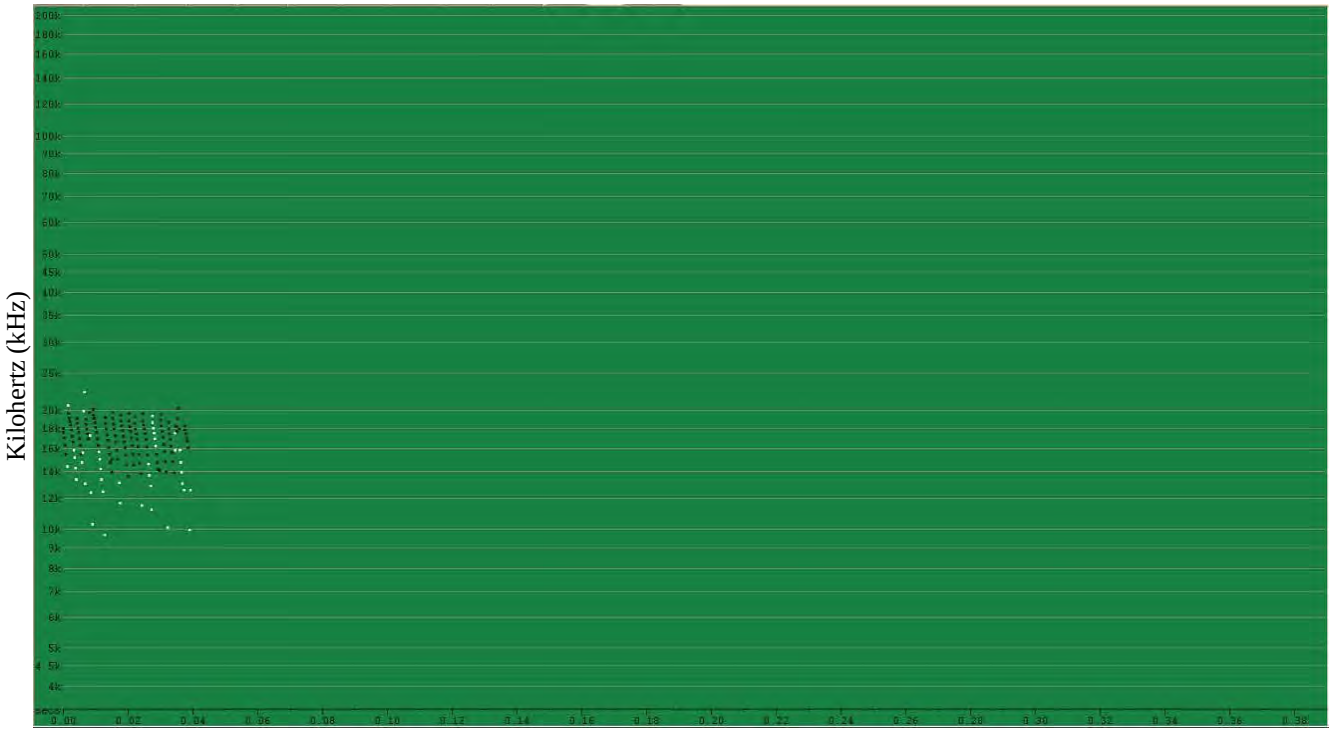


Figure 4. Representative call for *Euderma maculatum*

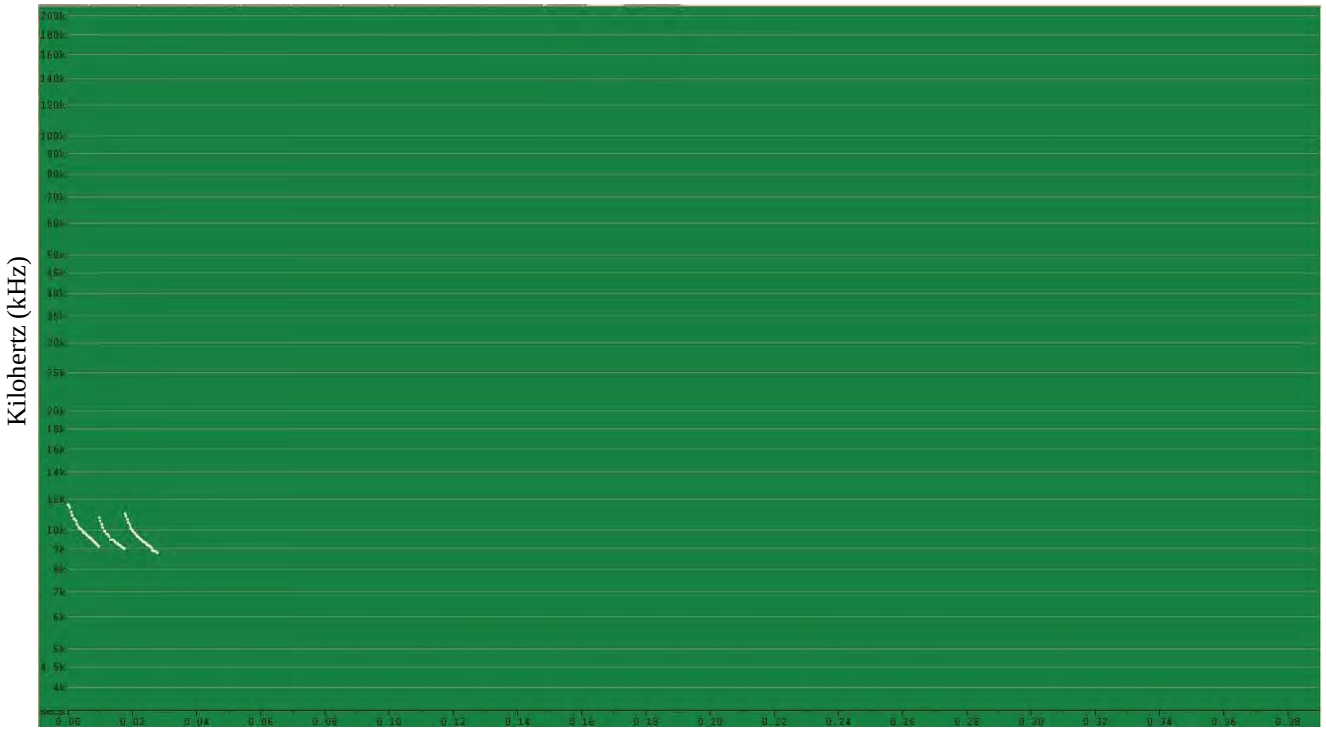


Figure 5. Representative call for *Eumops perotis*

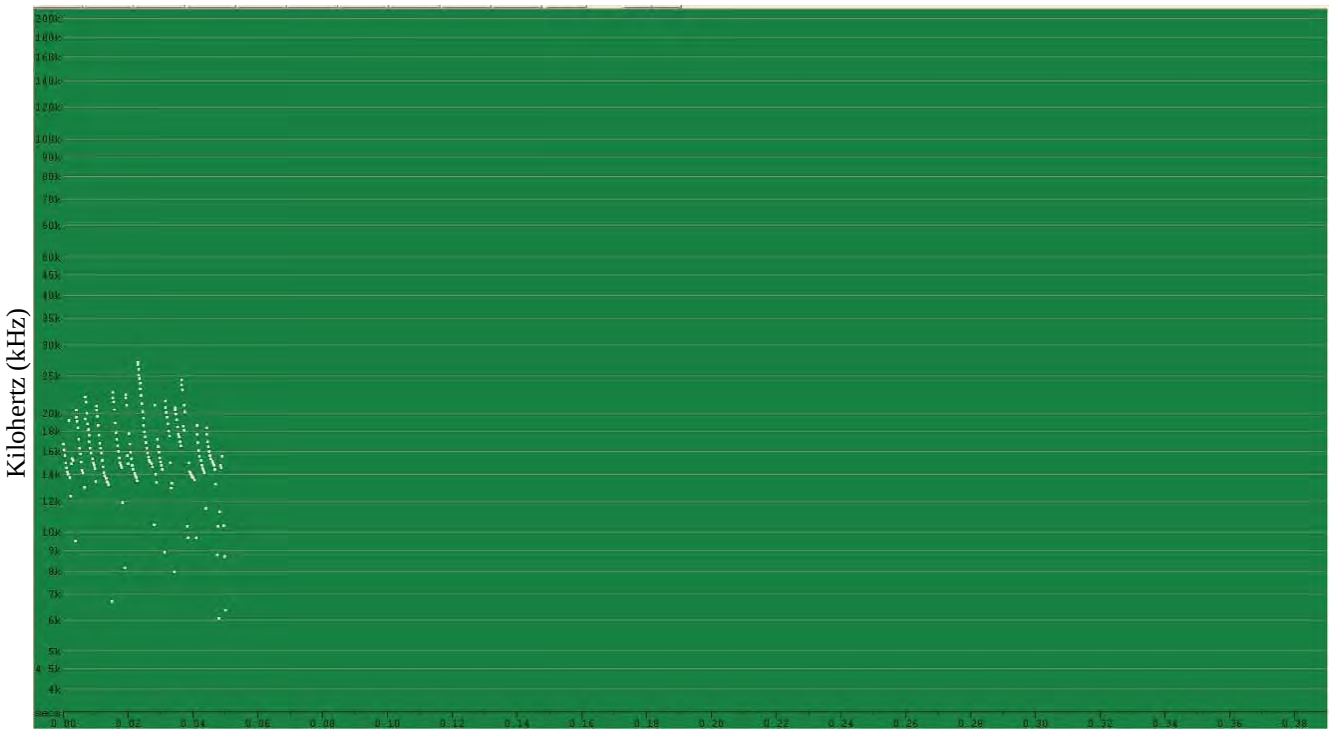


Figure 6. Representative call for *Idionycteris phyllotis*

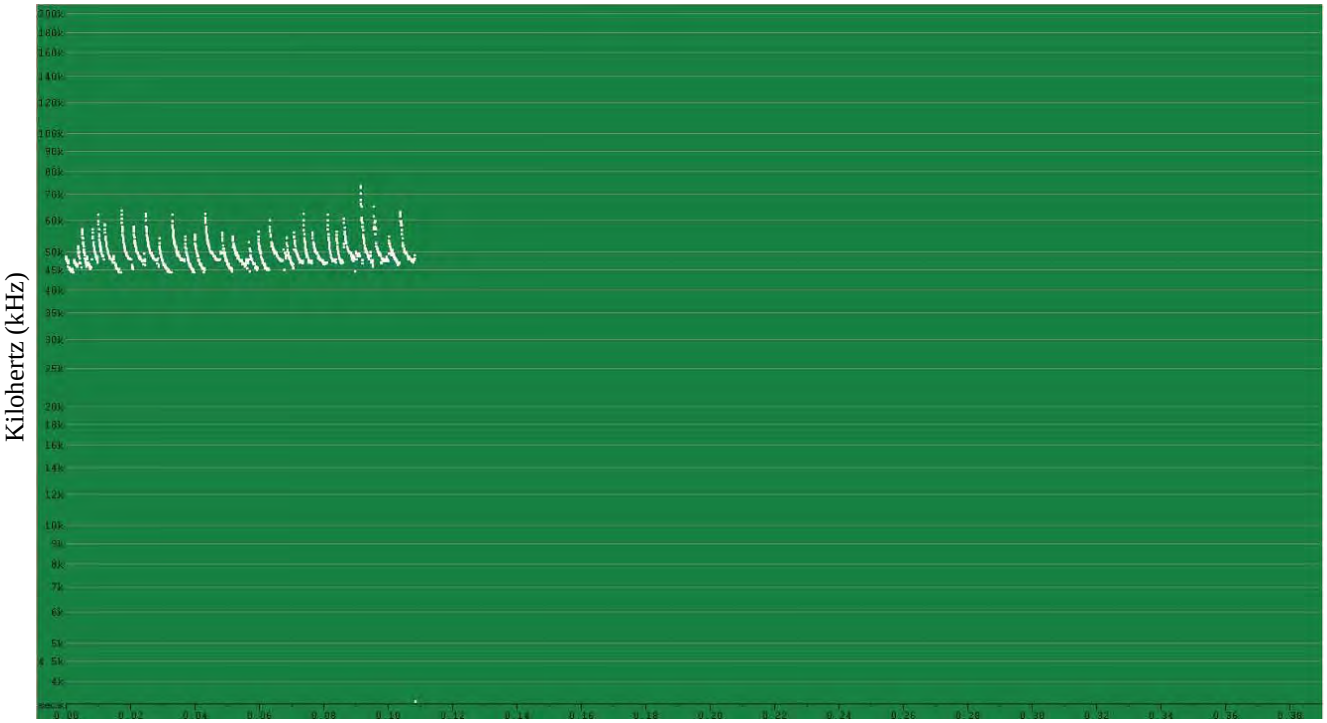


Figure 7. Representative call for *Lasiurus blossevillii*

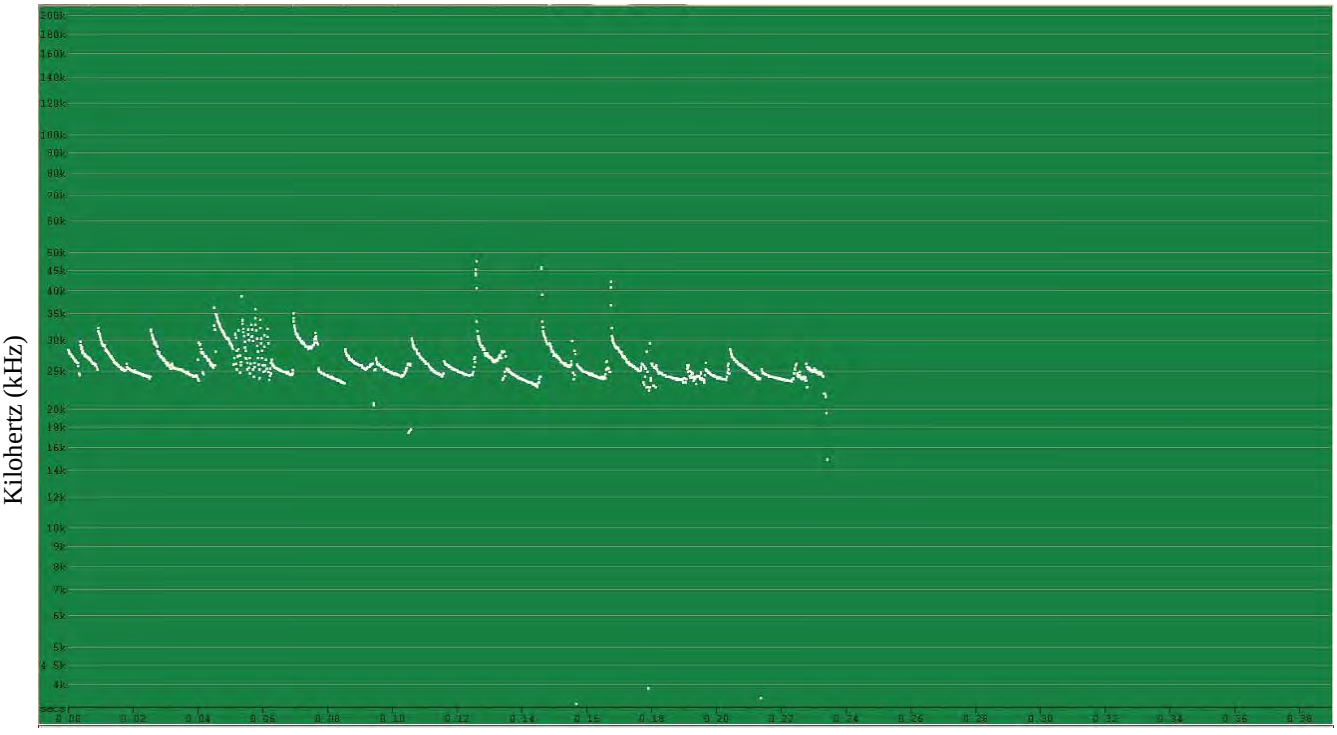


Figure 8. Representative call for *Lasiurus cinereus*

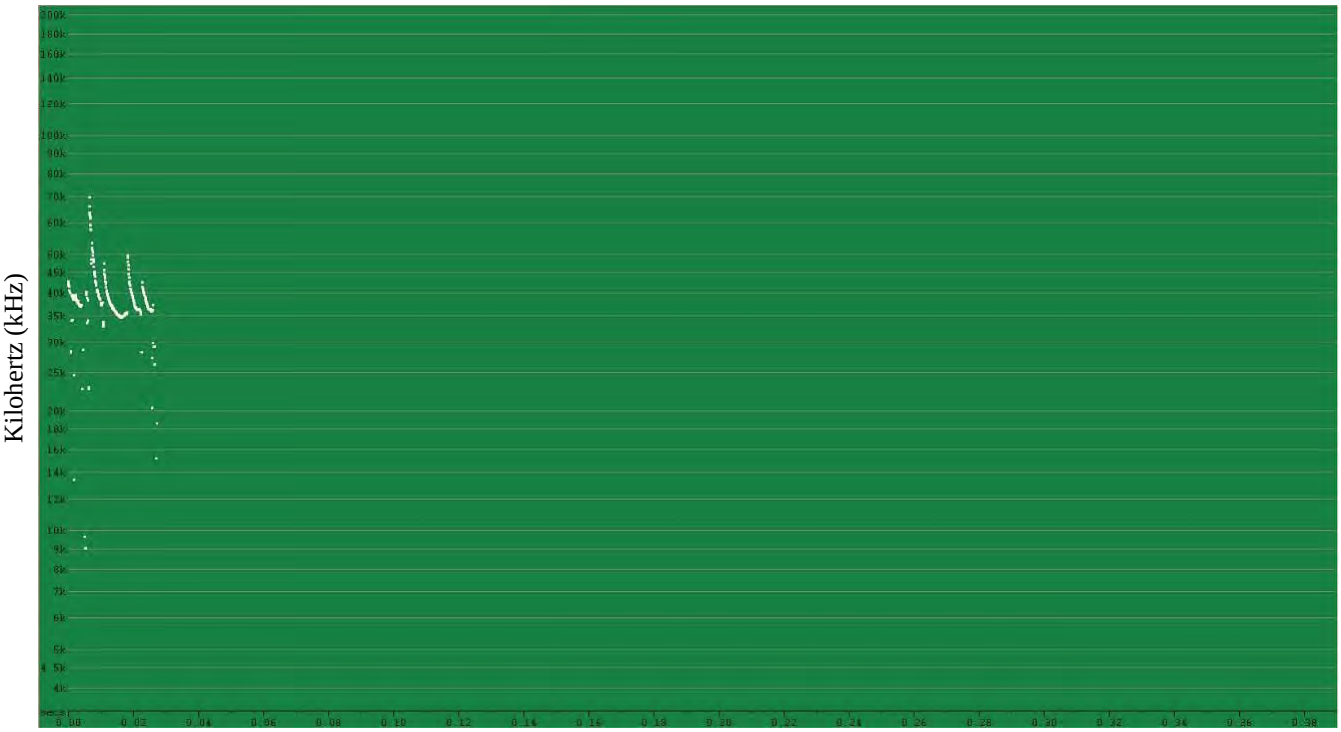


Figure 9. Representative call for *Lasiurus xanthinus*

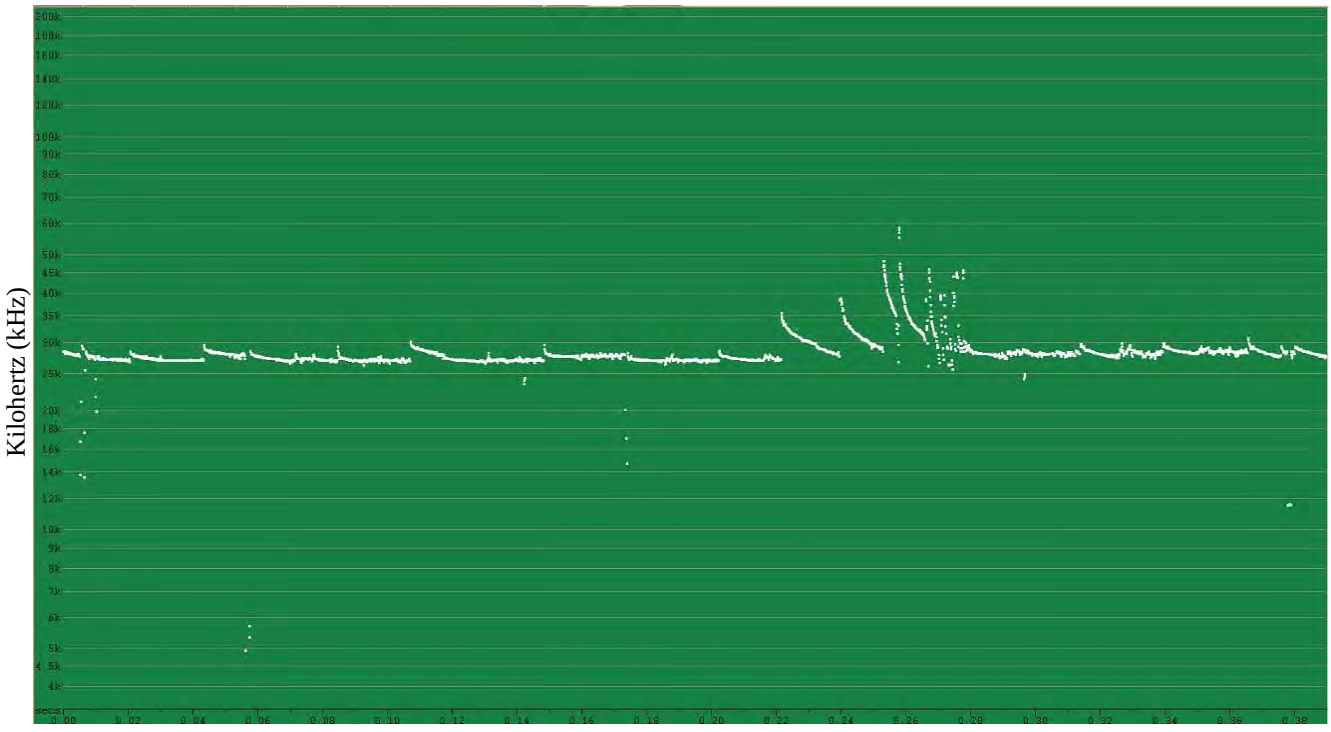


Figure 10. Representative call for *Lasionycteris noctivagans*

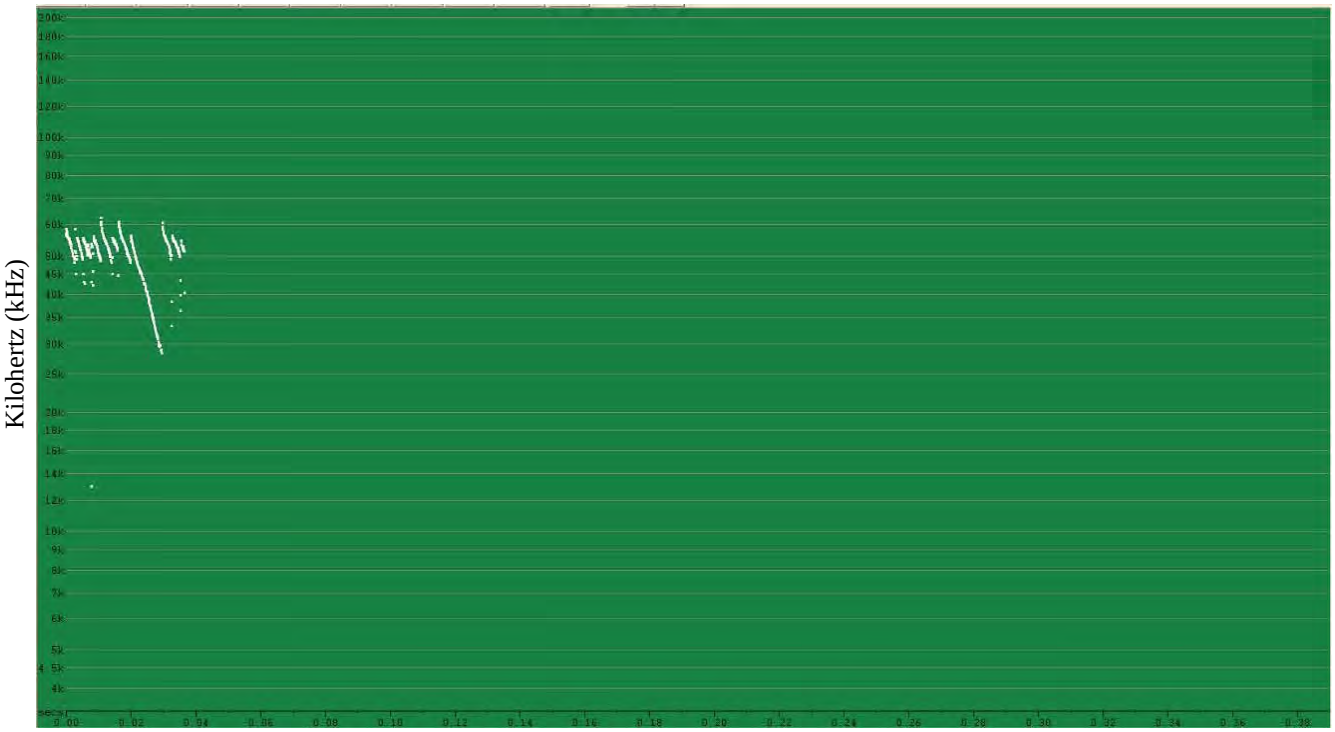


Figure 11. Representative call for *Macrotus californicus*

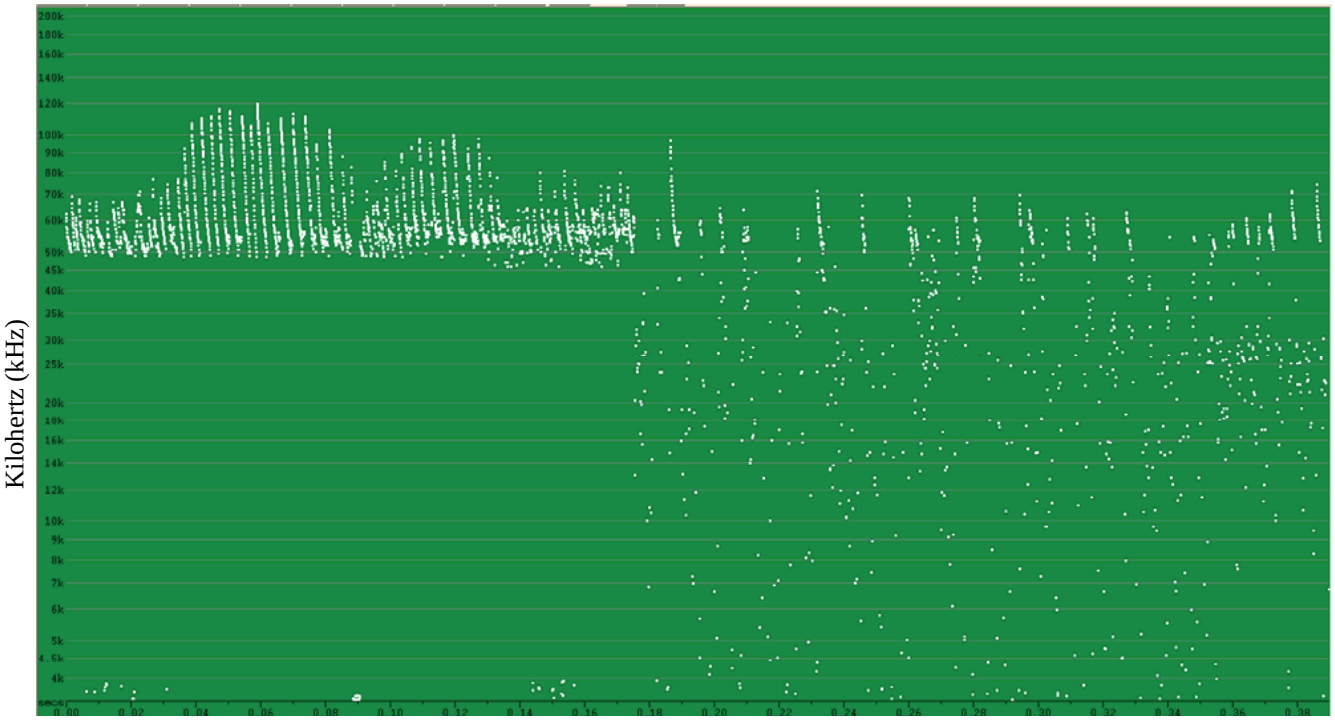


Figure 12. Representative call for *Myotis californicus*

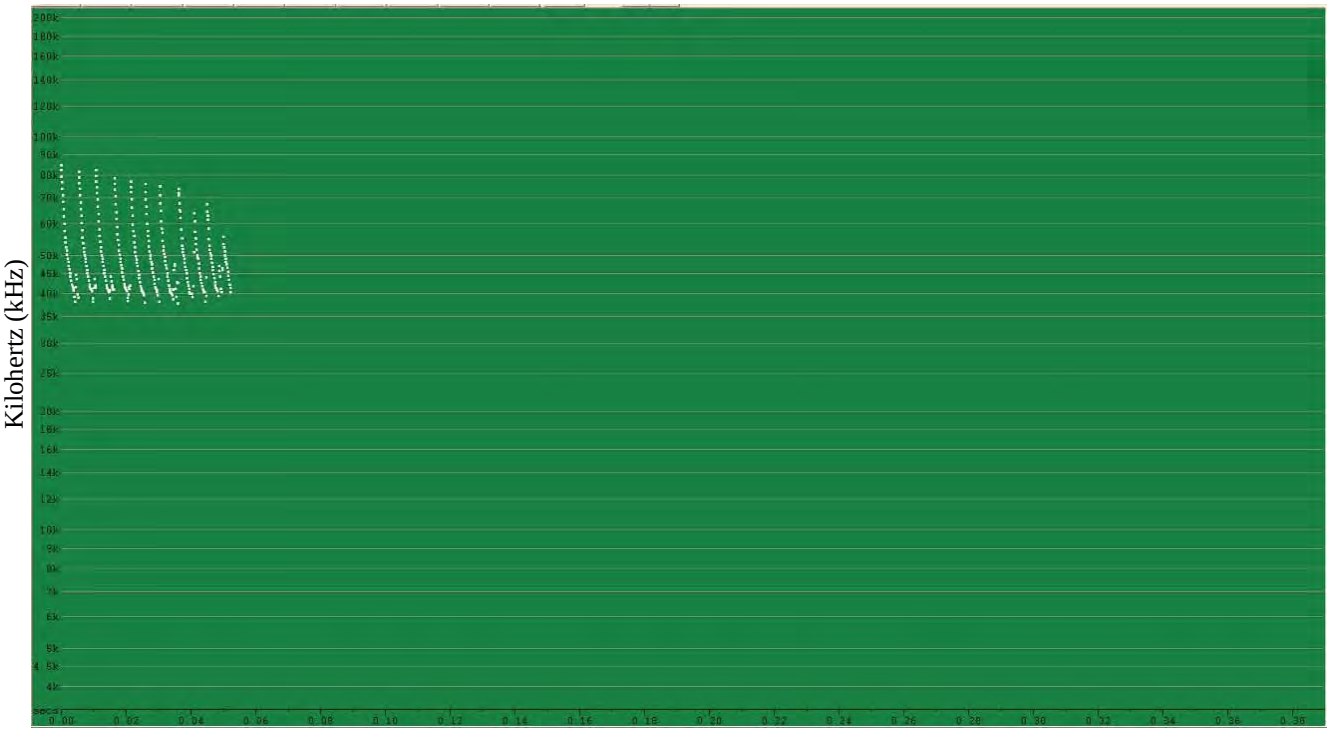


Figure 13. Representative call for *Myotis ciliolabrum*

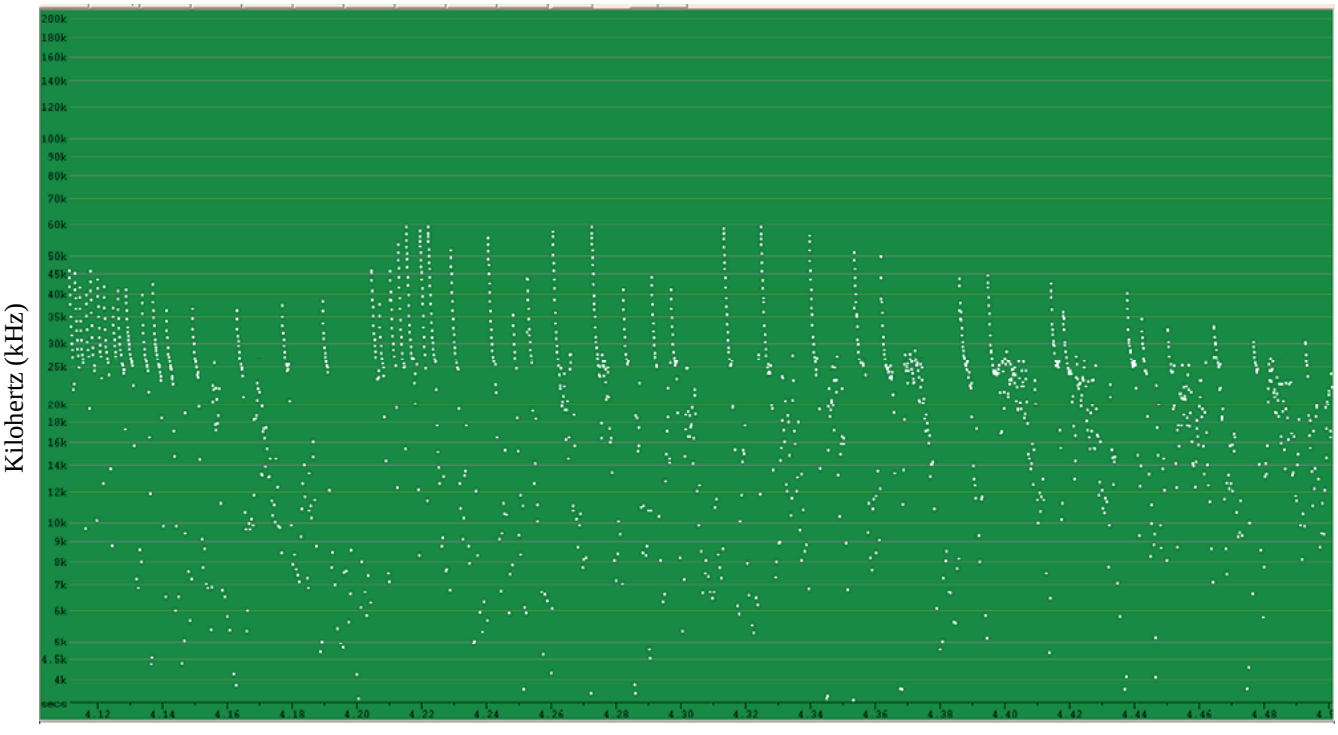


Figure 14. Representative call for *Myotis thysanodes*

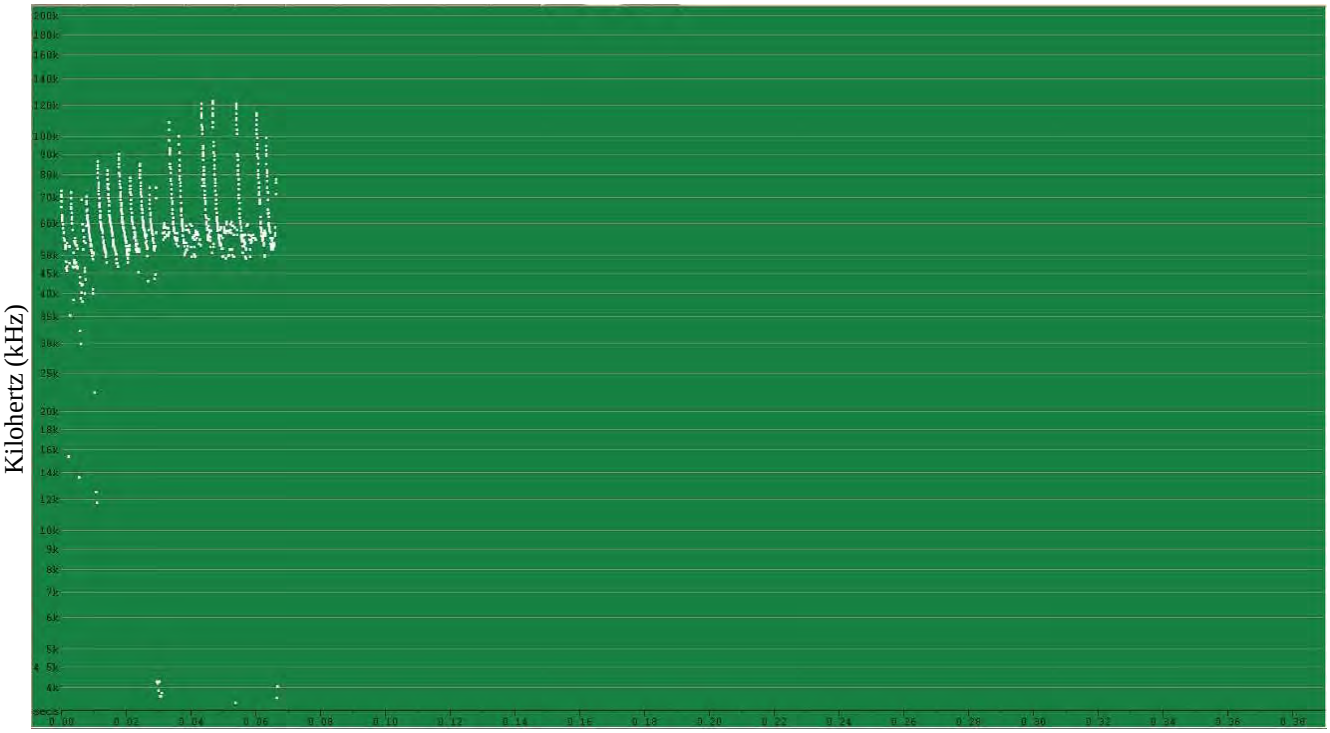


Figure 15. Representative call for *Myotis yumanensis*

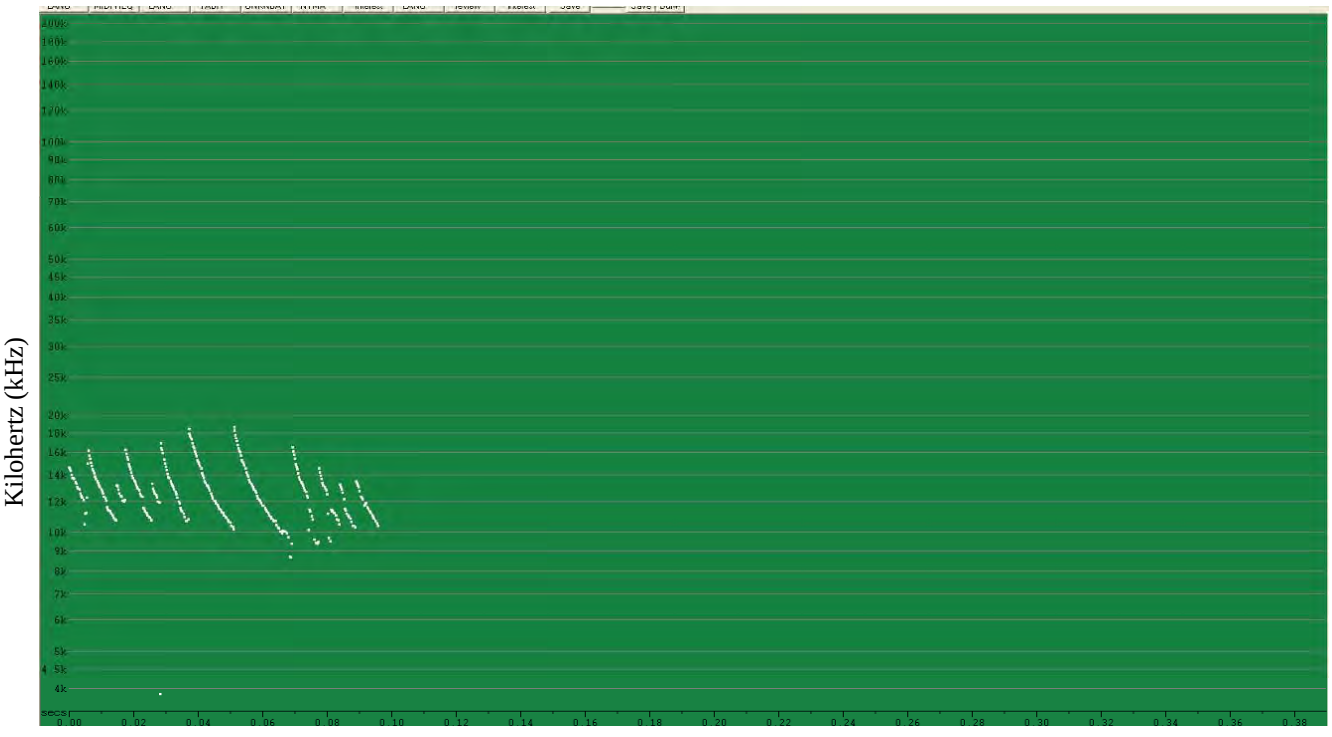


Figure 16. Representative call for *Nyctinomops perotis*

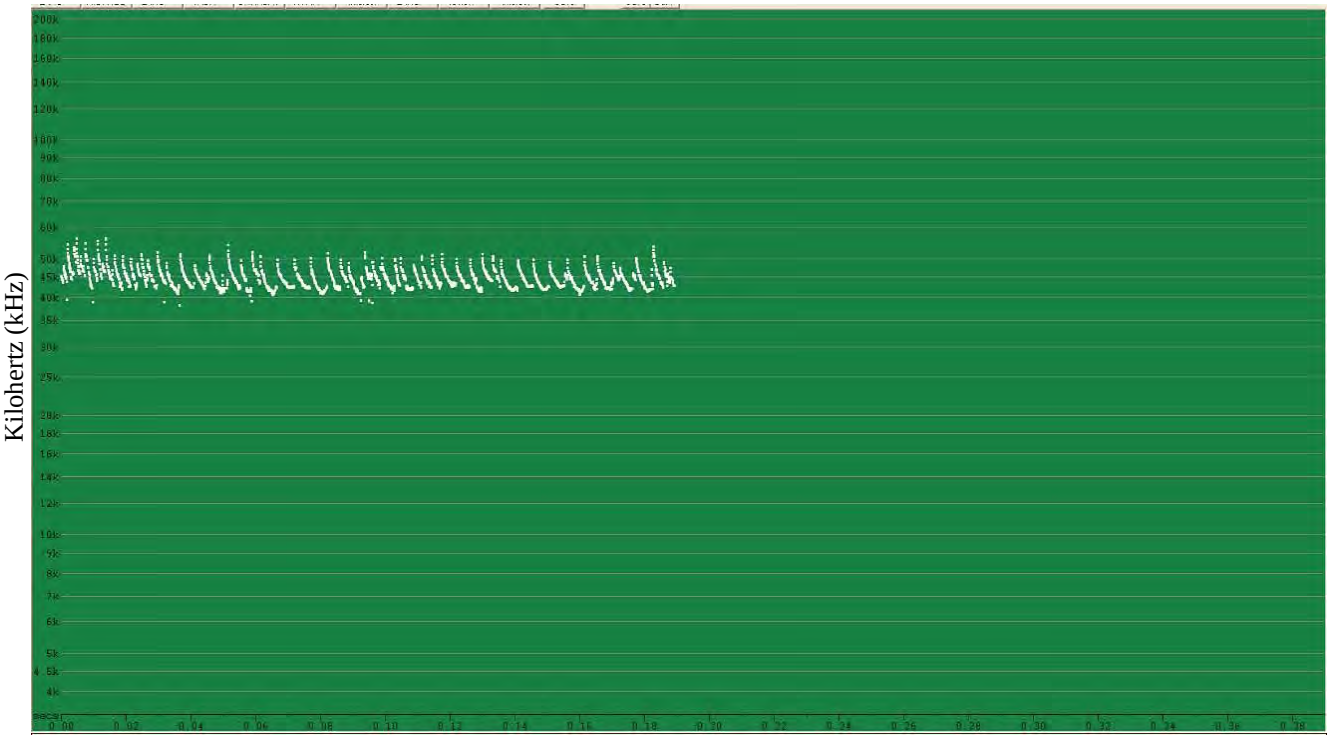


Figure 17. Representative call for *Parastrellus hesperus*

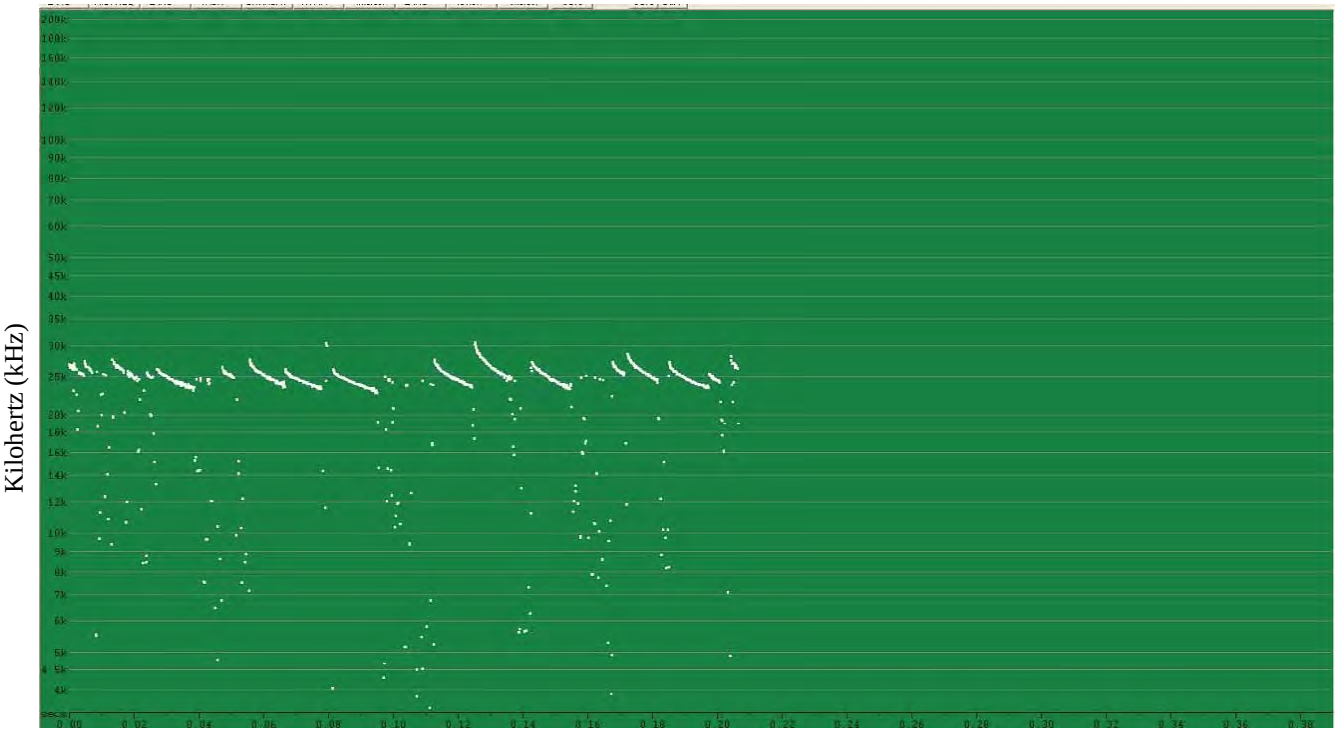


Figure 18. Representative call for *Tadarida brasiliensis*

Appendix E

Five Years of Raw Acoustic Data

Table 1 – Upstream Data

Upstream 2004

	Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Files	ANPA	0.00	9.00	10.00	5.00	8.00	185.00	117.00	131.00	21.00	23.00	4.00	1.00	514.00
	COTO	0.00	0.00	0.00	1.00	0.00	2.00	16.00	2.00	0.00	0.00	0.00	0.00	21.00
	EPFU	0.00	29.00	92.00	198.00	54.00	970.00	5634.00	2303.00	61.00	1.00	5.00	1.00	9348.00
	EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
	EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LABL	0.00	0.00	0.00	0.00	0.00	2.00	1.00	4.00	1.00	7.00	0.00	0.00	15.00
	LACI	0.00	1.00	14.00	95.00	4.00	0.00	42.00	31.00	22.00	0.00	0.00	0.00	209.00
	LAXA	0.00	34.00	355.00	45.00	115.00	457.00	1210.00	3852.00	1822.00	313.00	78.00	2.00	8283.00
	LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MYCA	1.00	11.00	111.00	138.00	84.00	1022.00	2241.00	2323.00	1792.00	803.00	4.00	0.00	8530.00
	MYCI	0.00	0.00	0.00	0.00	0.00	0.00	9.00	2.00	1.00	4.00	0.00	0.00	16.00
	MYTH	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	MYYU	1.00	2.00	28.00	22.00	28.00	97.00	813.00	4350.00	4803.00	940.00	20.00	3.00	11107.00
	NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
	PAHE	2.00	0.00	35.00	25.00	16.00	116.00	1378.00	1791.00	1345.00	99.00	5.00	2.00	4814.00
	TABR	93.00	107.00	1491.00	579.00	308.00	1188.00	8844.00	12888.00	3359.00	1604.00	130.00	65.00	30656.00
	TOTAL	97.00	193.00	2136.00	1109.00	617.00	4039.00	20305.00	27678.00	13227.00	3795.00	246.00	74.00	73516.00
Calls	**Species**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**TOTAL**
	ANPA	0.00	66.00	36.00	85.00	100.00	3923.00	2251.00	2704.00	318.00	201.00	16.00	10.00	9710.00
	COTO	0.00	0.00	0.00	1.00	0.00	6.00	72.00	2.00	0.00	0.00	0.00	0.00	81.00
	EPFU	0.00	410.00	3186.00	2995.00	824.00	19291.00	160055.00	58464.00	2780.00	15.00	40.00	20.00	248080.00
	EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	12.00
	EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LABL	0.00	0.00	0.00	0.00	0.00	13.00	5.00	12.00	6.00	54.00	0.00	0.00	90.00
	LACI	0.00	33.00	137.00	1479.00	30.00	0.00	553.00	629.00	434.00	0.00	0.00	0.00	3295.00
	LAXA	0.00	528.00	3759.00	289.00	636.00	2290.00	12332.00	40189.00	33785.00	3755.00	280.00	20.00	97863.00
	LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MYCA	2.00	210.00	1357.00	1042.00	184.00	3002.00	20067.00	28275.00	22435.00	26112.00	2.00	0.00	102688.00
	MYCI	0.00	0.00	0.00	0.00	0.00	0.00	153.00	36.00	2.00	306.00	0.00	0.00	497.00
	MYTH	0.00	0.00	0.00	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.00
	MYYU	1.00	15.00	714.00	387.00	434.00	1074.00	15345.00	100821.00	116476.00	33107.00	218.00	12.00	268604.00
	NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	15.00
	PAHE	14.00	0.00	560.00	278.00	96.00	744.00	22525.00	34713.00	38364.00	4272.00	46.00	6.00	101618.00
	TABR	796.00	1249.00	27610.00	5922.00	4209.00	13609.00	186321.00	287939.00	83748.00	14159.00	991.00	579.00	627132.00
	TOTAL	813.00	2511.00	37359.00	12502.00	6513.00	43952.00	419679.00	553799.00	298348.00	81993.00	1593.00	647.00	1459709.00
Minutes	**Species**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**TOTAL**
	ANPA	0.00	5.00	7.00	5.00	8.00	93.00	111.00	113.00	20.00	19.00	4.00	1.00	386.00
	COTO	0.00	0.00	0.00	1.00	0.00	2.00	15.00	2.00	0.00	0.00	0.00	0.00	20.00
	EPFU	0.00	13.00	61.00	160.00	49.00	568.00	2794.00	1285.00	48.00	1.00	4.00	1.00	4984.00
	EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
	EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LABL	0.00	0.00	0.00	0.00	0.00	2.00	1.00	4.00	1.00	7.00	0.00	0.00	15.00
	LACI	0.00	1.00	14.00	73.00	3.00	0.00	34.00	30.00	17.00	0.00	0.00	0.00	172.00
	LAXA	0.00	23.00	291.00	39.00	97.00	376.00	933.00	2637.00	1123.00	246.00	71.00	2.00	5838.00
	LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MYCA	1.00	9.00	87.00	92.00	73.00	632.00	1559.00	1872.00	1396.00	532.00	4.00	0.00	6257.00
	MYCI	0.00	0.00	0.00	0.00	0.00	0.00	8.00	2.00	1.00	4.00	0.00	0.00	15.00
	MYTH	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
	MYYU	1.00	2.00	26.00	20.00	25.00	92.00	722.00	2901.00	2704.00	725.00	18.00	3.00	7239.00
	NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
	PAHE	2.00	0.00	29.00	13.00	15.00	101.00	1065.00	1408.00	868.00	69.00	5.00	2.00	3577.00
	TABR	73.00	104.00	1121.00	485.00	256.00	827.00	3966.00	6051.00	1956.00	929.00	125.00	57.00	15950.00
	TOTAL	77.00	157.00	1636.00	889.00	526.00	2693.00	11208.00	16306.00	8134.00	2533.00	231.00	66.00	44456.00
IA	**Species**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**TOTAL**
	ANPA	0.00	17.24	28.00	35.71	72.73	357.69	396.43	364.52	86.96	79.17	13.33	3.45	130.85
	COTO	0.00	0.00	0.00	7.14	0.00	7.69	53.57	6.45	0.00	0.00	0.00	0.00	6.78
	EPFU	0.00	44.83	244.00	1142.86	445.45	2184.62	9978.57	4145.16	208.70	4.17	13.33	3.45	1689.49
	EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.17	0.00	0.00	0.34
	EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LABL	0.00	0.00	0.00	0.00	0.00	7.69	3.57	12.90	4.35	29.17	0.00	0.00	5.08
	LACI	0.00	3.45	56.00	521.43	27.27	0.00	121.43	96.77	73.91	0.00	0.00	0.00	58.31
	LAXA	0.00	79.31	1164.00	278.57	881.82	1446.15	3332.14	8506.45	4882.61	1025.00	236.67	6.90	1978.98
	LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MYCA	4.00	31.03	348.00	657.14	663.64	2430.77	5567.86	6038.71	6069.57	2216.67	13.33	0.00	2121.02
	MYCI	0.00	0.00	0.00	0.00	0.00	0.00	28.57	6.45	4.35	16.67	0.00	0.00	5.08
	MYTH	0.00	0.00	0.00	7.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
	MYYU	4.00	6.90	104.00	142.86	227.27	353.85	2578.57	9358.06	11756.52	3020.83	60.00	10.34	2453.90
	NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.23	0.00	0.00	0.00	0.00	0.34
	PAHE	8.00	0.00	116.00	92.86	136.36	388.46	3803.57	4541.94	3773.91	287.50	16.67	6.90	1212.54
	TABR	292.00	358.62	4484.00	3464.29	2327.27	3180.77	14164.29	19519.35	8504.35	3870.83	416.67	196.55	5406.78
	TOTAL	308.00	541.38	6544.00	6350.00	4781.82	10357.69	40028.57	52600.00	35365.22	10554.17	770.00	227.59	15069.83
	Days	25.00	29.00	25.00	14.00	11.00	26.00	28.00	31.00	23.00	24.00	30.00	29.00	295.00

Upstream 2005

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	2.00	8.00	43.00	20.00	11.00	11.00	1.00	0.00	0.00	96.00
COTO	0.00	0.00	0.00	0.00	0.00	1.00	3.00	1.00	0.00	0.00	0.00	0.00	5.00
EPFU	0.00	0.00	0.00	9.00	32.00	733.00	357.00	77.00	284.00	36.00	4.00	10.00	1542.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	28.00	30.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	8.00	18.00	0.00	0.00	27.00
LACI	0.00	0.00	0.00	16.00	21.00	1.00	0.00	10.00	47.00	2.00	0.00	6.00	103.00
LAXA	0.00	1.00	0.00	7.00	158.00	483.00	172.00	1159.00	1002.00	387.00	2.00	0.00	3371.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	2.00	0.00	37.00	111.00	245.00	380.00	202.00	698.00	1051.00	1.00	1.00	2728.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	2.00	0.00	0.00	0.00	14.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	1.00	0.00	23.00	231.00	719.00	918.00	1342.00	2220.00	743.00	28.00	2.00	6227.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	288.00	290.00
PAHE	0.00	1.00	0.00	28.00	107.00	303.00	739.00	816.00	603.00	143.00	11.00	2.00	2753.00
TABR	0.00	19.00	0.00	1713.00	1486.00	2650.00	1967.00	2459.00	1447.00	4841.00	204.00	588.00	17374.00
TOTAL	0.00	24.00	0.00	1836.00	2154.00	5178.00	4568.00	6079.00	6324.00	7222.00	250.00	925.00	34560.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	26.00	61.00	289.00	285.00	118.00	78.00	22.00	0.00	0.00	879.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	36.00	10.00	0.00	0.00	0.00	0.00	46.00
EPFU	0.00	0.00	0.00	176.00	671.00	14211.00	5711.00	1276.00	3561.00	511.00	46.00	59.00	26222.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.00	0.00	0.00	0.00	0.00	53.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	24.00	0.00	0.00	0.00	0.00	127.00	234.00	0.00	0.00	385.00
LACI	0.00	0.00	0.00	107.00	236.00	39.00	0.00	135.00	465.00	3.00	0.00	48.00	1033.00
LAXA	0.00	1.00	0.00	40.00	960.00	2709.00	1285.00	6667.00	4572.00	1730.00	9.00	0.00	17973.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	1.00	0.00	88.00	417.00	1390.00	3034.00	980.00	4327.00	13187.00	18.00	0.00	23442.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	110.00	0.00	26.00	0.00	0.00	0.00	136.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	3.00	0.00	305.00	2925.00	8121.00	12294.00	16387.00	26073.00	13565.00	351.00	25.00	80049.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	6925.00	6939.00
PAHE	0.00	8.00	0.00	219.00	840.00	3224.00	8777.00	8318.00	6093.00	1472.00	74.00	8.00	29033.00
TABR	0.00	65.00	0.00	15850.00	13986.00	26546.00	21923.00	28929.00	14096.00	38918.00	782.00	3231.00	164326.00
TOTAL	0.00	78.00	0.00	16835.00	20096.00	56529.00	53455.00	62873.00	59432.00	69642.00	1280.00	10296.00	350516.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	2.00	8.00	41.00	20.00	11.00	10.00	1.00	0.00	0.00	93.00
COTO	0.00	0.00	0.00	0.00	0.00	1.00	3.00	1.00	0.00	0.00	0.00	0.00	5.00
EPFU	0.00	0.00	0.00	9.00	28.00	522.00	300.00	68.00	245.00	34.00	3.00	3.69	1212.69
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	8.00	17.00	0.00	0.00	26.00
LACI	0.00	0.00	0.00	13.00	16.00	1.00	0.00	7.00	38.00	2.00	0.00	3.00	80.00
LAXA	0.00	1.00	0.00	7.00	143.00	386.00	158.00	913.00	876.00	321.00	2.00	0.00	2807.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	2.00	0.00	32.00	100.00	232.00	334.00	195.00	584.00	568.00	1.00	0.00	2048.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	2.00	0.00	0.00	0.00	12.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	1.00	0.00	23.00	222.00	644.00	794.00	1146.00	1665.00	571.00	26.00	1.56	5093.56
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	433.49	435.49
PAHE	0.00	1.00	0.00	27.00	103.00	266.00	641.00	735.00	490.00	121.00	10.00	0.50	2394.50
TABR	0.00	19.00	0.00	1429.00	1255.00	1809.00	1426.00	1937.00	1225.00	2249.00	182.00	202.25	11733.25
TOTAL	0.00	24.00	0.00	1543.00	1875.00	3902.00	3686.00	5014.00	5145.00	3884.00	224.00	644.51	25941.51

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	6.67	27.59	157.69	111.11	35.48	33.33	3.23	0.00	0.00	27.43
COTO	0.00	0.00	0.00	0.00	0.00	3.85	16.67	3.23	0.00	0.00	0.00	0.00	1.47
EPFU	0.00	0.00	0.00	30.00	96.55	2007.69	1666.67	219.35	816.67	109.68	10.00	11.91	357.73
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.23	0.00	0.00	0.00	0.00	0.29
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	26.67	54.84	0.00	0.00	7.67
LACI	0.00	0.00	0.00	43.33	55.17	3.85	0.00	22.58	126.67	6.45	0.00	9.69	23.60
LAXA	0.00	4.76	0.00	23.33	493.10	1484.62	877.78	2945.16	2920.00	1035.48	6.67	0.00	828.02
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	9.52	0.00	106.67	344.83	892.31	1855.56	629.03	1946.67	1832.26	3.33	0.00	604.13
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	55.56	0.00	6.67	0.00	0.00	0.00	3.54
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	4.76	0.00	76.67	765.52	2476.92	4411.11	3696.77	5550.00	1841.94	86.67	5.05	1502.53
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.67	0.00	0.00	1398.35	128.46
PAHE	0.00	4.76	0.00	90.00	355.17	1023.08	3561.11	2370.97	1633.33	390.32	33.33	1.62	706.34
TABR	0.00	90.48	0.00	4763.33	4327.59	6957.69	7922.22	6248.39	4083.33	7254.84	606.67	652.43	3461.14
TOTAL	0.00	114.29	0.00	5143.33	6465.52	15007.69	20477.78	16174.19	17150.00	12529.03	746.67	2079.05	7652.36
Days	31.00	21.00	31.00	30.00	29.00	26.00	18.00	31.00	30.00	31.00	30.00	31.00	339.00

Upstream 2006

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	1.00	2.00	0.00	0.00	0.00	55.00	1.00	1.00	0.00	0.00	60.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	0.00	79.00	324.00	0.00	241.00	946.00	2907.00	748.00	161.00	0.00	0.00	5406.00
EUPE	6.00	0.00	0.00	2.00	0.00	1.00	1.00	29.00	1.00	0.00	0.00	0.00	40.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	11.00	0.00	193.00	465.00	0.00	5497.00	12121.00	8701.00	1009.00	621.00	0.00	0.00	28618.00
LAXA	0.00	0.00	0.00	0.00	0.00	22.00	2.00	17.00	1.00	0.00	0.00	0.00	42.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	1.00	0.00	0.00	9.00	0.00	13.00	1.00	1.00	0.00	0.00	25.00
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	280.00	0.00	620.00	2762.00	0.00	8557.00	19901.00	18767.00	1299.00	2290.00	0.00	0.00	54476.00
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	93.00	300.00	0.00	53.00	74.00	1942.00	946.00	407.00	0.00	0.00	3815.00
TOTAL	297.00	0.00	987.00	3856.00	0.00	14380.00	33045.00	32431.00	4006.00	3481.00	0.00	0.00	92483.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	83.00	241.00	0.00	0.00	0.00	4585.00	139.00	162.00	0.00	0.00	5210.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	0.00	6544.00	27735.00	0.00	8665.00	39134.00	255619.00	56925.00	5854.00	0.00	0.00	400476.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	252.00	0.00	9338.00	29903.00	0.00	598777.00	1340609.00	894807.00	66527.00	18683.00	0.00	0.00	2958896.00
LAXA	0.00	0.00	0.00	0.00	0.00	473.00	102.00	1098.00	97.00	0.00	0.00	0.00	1770.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	45.00	0.00	0.00	214.00	0.00	672.00	24.00	185.00	0.00	0.00	1140.00
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	6445.00	0.00	16861.00	224039.00	0.00	705876.00	1770168.00	1195409.00	123575.00	79005.00	0.00	0.00	4121378.00
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	3805.00	15118.00	0.00	1588.00	1773.00	192044.00	74170.00	17595.00	0.00	0.00	306093.00
TOTAL	6697.00	0.00	36676.00	297056.00	0.00	1315593.00	3151786.00	2544234.00	321457.00	121484.00	0.00	0.00	7794983.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	3.88	11.26	0.00	0.00	0.00	214.25	6.50	7.57	0.00	0.00	243.46
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	0.00	305.79	1296.03	0.00	404.91	1828.69	11944.81	2660.05	273.55	0.00	0.00	18713.83
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	11.78	0.00	436.36	1397.34	0.00	27980.23	62645.28	41813.41	3108.74	873.04	0.00	0.00	138266.17
LAXA	0.00	0.00	0.00	0.00	0.00	22.10	4.77	51.31	4.53	0.00	0.00	0.00	82.71
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	2.10	0.00	0.00	10.00	0.00	31.40	1.12	8.64	0.00	0.00	53.27
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	301.17	0.00	787.90	10469.11	0.00	32984.86	82718.13	55860.23	5774.53	3691.82	0.00	0.00	192587.76
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	177.80	706.45	0.00	74.21	82.85	8974.02	3465.89	822.20	0.00	0.00	14303.41
TOTAL	312.94	0.00	1713.83	13881.12	0.00	61476.31	147279.72	118889.44	15021.36	5676.82	0.00	0.00	364251.54

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	13.37	37.54	0.00	0.00	0.00	691.14	21.65	84.11	0.00	0.00	130.89
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	0.00	1054.46	4320.09	0.00	2699.38	5899.01	38531.66	8866.82	3039.46	0.00	0.00	10061.20
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	147.20	0.00	1504.67	4657.79	0.00	186534.89	202081.55	134881.97	10362.46	9700.42	0.00	0.00	74336.65
LAXA	0.00	0.00	0.00	0.00	0.00	147.35	15.38	165.51	15.11	0.00	0.00	0.00	44.47
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	7.25	0.00	0.00	66.67	0.00	101.30	3.74	96.05	0.00	0.00	28.64
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	3764.60	0.00	2716.89	34897.04	0.00	219899.07	266832.68	180194.30	19248.44	41020.25	0.00	0.00	103541.80
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	613.12	2354.83	0.00	494.70	267.26	28948.45	11552.96	9135.51	0.00	0.00	7690.01
TOTAL	3911.80	0.00	5909.76	46270.40	0.00	409842.06	475095.87	383514.32	50071.18	63075.80	0.00	0.00	195834.16
DAYS	8.00	0.00	29.00	30.00	3.00	15.00	31.00	31.00	30.00	9.00	0.00	0.00	186.00

Upstream 2007

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	1.00	1.00	4.00	1.00	0.00	0.00	0.00	0.00	7.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
EPFU	0.00	0.00	0.00	110.00	637.00	292.00	648.00	652.00	294.00	1140.00	108.00	3.00	3884.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	0.00	0.00	0.00	118.00	900.00	2102.00	3095.00	1814.00	1272.00	266.00	45.00	5.00	9617.00
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	3.00	88.00	73.00	0.00	5.00	0.00	3.00	0.00	0.00	172.00
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	0.00	0.00	0.00	660.00	4682.00	5424.00	0.00	0.00	0.00	0.00	0.00	0.00	10766.00
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	0.00	187.00	1448.00	1374.00	2669.00	1772.00	632.00	1662.00	82.00	3.00	9829.00
TOTAL	0.00	0.00	0.00	1078.00	7756.00	9266.00	6416.00	4246.00	2198.00	3071.00	235.00	11.00	34277.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	91.00	357.00	330.00	40.00	0.00	0.00	0.00	0.00	818.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	14.00
EPFU	0.00	0.00	0.00	2226.00	14773.00	8286.00	44183.00	26705.00	10028.00	63592.00	2586.00	55.00	172434.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	16.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	0.00	0.00	0.00	3839.00	38212.00	109591.00	295589.00	108424.00	65280.00	11685.00	1021.00	94.00	633735.00
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	137.00	3685.00	5492.00	0.00	316.00	0.00	62.00	0.00	0.00	9692.00
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	0.00	0.00	0.00	18487.00	151917.00	676855.00	1099413.00	432247.00	112563.00	34850.00	45522.00	3048.00	2574902.00
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	0.00	3082.00	36068.00	151476.00	216178.00	108847.00	22298.00	75083.00	1417.00	53.00	614502.00
TOTAL	0.00	0.00	0.00	27771.00	244746.00	952057.00	1655693.00	676609.00	210169.00	185272.00	50546.00	3250.00	4006113.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	5.70	22.35	20.66	2.50	0.00	0.00	0.00	0.00	51.21
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.88
EPFU	0.00	0.00	0.00	139.34	924.76	518.69	2765.76	1671.67	627.73	3980.72	161.88	3.44	10793.99
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
IDPH	0.00	0.00	0.00	240.31	2391.99	6860.16	18503.22	6787.10	4086.38	731.46	63.91	5.88	39670.42
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	8.58	230.67	343.79	0.00	19.78	0.00	3.88	0.00	0.00	606.70
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	0.00	0.00	0.00	1157.25	9509.67	42369.64	68820.85	27057.72	7046.20	2181.53	2849.58	190.80	161183.22
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	0.00	192.93	2257.78	9482.07	13532.27	6813.58	1395.81	4700.03	88.70	3.32	38466.48
TOTAL	0.00	0.00	0.00	1738.40	15320.56	59596.68	103642.75	42354.24	13156.12	11597.62	3164.07	203.44	250773.90

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	18.38	74.49	66.64	10.02	0.00	0.00	0.00	0.00	19.69
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51	0.00	0.00	0.00	0.00	0.34
EPFU	0.00	0.00	0.00	663.54	2983.09	1728.95	8921.80	6686.70	2092.44	12841.03	539.59	11.11	4151.53
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.01	0.00	0.00	0.00	0.00	0.39
IDPH	0.00	0.00	0.00	1144.35	7716.09	22867.19	59687.82	27148.42	13621.28	2359.53	213.04	18.98	15257.85
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	40.84	744.11	1145.96	0.00	79.12	0.00	12.52	0.00	0.00	233.35
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NYMA	0.00	0.00	0.00	5510.69	30676.36	141232.13	222002.73	108230.86	23487.32	7037.21	9498.59	615.48	61993.55
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TABR	0.00	0.00	0.00	918.70	7283.15	31606.89	43652.48	27254.33	4652.69	15161.39	295.67	10.70	14794.80
TOTAL	0.00	0.00	0.00	8278.11	49421.17	198655.61	334331.47	169416.96	43853.73	37411.68	10546.90	656.27	96451.50
DAYS	0.00	0.00	0.00	21.00	31.00	30.00	31.00	25.00	30.00	31.00	30.00	31.00	260.00

Upstream 2008

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	3.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	12.00	142.00	332.00	336.00	318.00	129.00	1287.00	793.00	806.00	298.00	2.00	4455.00
EUPE	0.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	3.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	7.00	50.00	128.00	281.00	693.00	1683.00	1728.00	4072.00	805.00	119.00	102.00	2.00	9670.00
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1312.00	998.00	0.00	0.00	2310.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	1.00	0.00	4.00	5.00	1.00	0.00	11.00	5.00	0.00	0.00	27.00
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.00	7.00	0.00	0.00	58.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	319.00	148.00	0.00	0.00	467.00
TABR	1.00	33.00	177.00	582.00	633.00	734.00	883.00	3900.00	1209.00	1041.00	434.00	0.00	9627.00
TOTAL	8.00	95.00	448.00	1196.00	1666.00	2742.00	2743.00	9260.00	4500.00	3124.00	834.00	4.00	26620.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	22.00	0.00	0.00	154.00	202.00	0.00	0.00	0.00	0.00	378.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	194.00	7413.00	25292.00	11907.00	11887.00	7207.00	66854.00	26473.00	69729.00	12843.00	47.00	239846.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	208.00	1992.00	5686.00	21533.00	43013.00	138016.00	170989.00	262707.00	28517.00	4912.00	3847.00	14.00	681434.00
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	135750.00	70494.00	0.00	0.00	206244.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	9.00	0.00	73.00	64.00	6.00	0.00	614.00	75.00	0.00	0.00	841.00
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58858.00	5813.00	0.00	0.00	64671.00
NYMA	9057.00	10599.00	29405.00	100988.00	145671.00	1078204.00	1013885.00	1159153.00	50296.00	7263.00	68534.00	7361.00	3680416.00
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19884.00	11023.00	0.00	0.00	30907.00
TABR	81.00	393.00	9234.00	31312.00	19300.00	35059.00	78756.00	244299.00	29927.00	53515.00	9237.00	0.00	511113.00
TOTAL	9346.00	13178.00	51747.00	179147.00	219964.00	1263230.00	1270997.00	1733215.00	350319.00	222824.00	94461.00	7422.00	5415850.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	1.38	0.00	0.00	9.64	12.64	0.00	0.00	0.00	0.00	23.66
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	12.14	464.04	1583.22	745.35	744.10	451.14	4184.91	1657.15	4364.88	803.94	2.94	15013.83
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	13.02	124.69	355.93	1347.92	2692.52	8639.50	10703.54	16444.88	1785.10	307.48	240.81	0.88	42656.28
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8497.65	4412.77	0.00	0.00	12910.42
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.56	0.00	4.57	4.01	0.38	0.00	38.44	4.69	0.00	0.00	52.64
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3684.38	363.88	0.00	0.00	4048.26
NYMA	566.95	663.47	1840.69	6321.63	9118.69	67493.21	63466.98	72560.44	3148.42	454.65	4290.08	460.78	230385.98
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1244.69	690.02	0.00	0.00	1934.71
TABR	5.07	24.60	578.03	1960.06	1208.14	2194.62	4929.95	15292.58	1873.36	3349.92	578.22	0.00	31994.55
TOTAL	585.04	824.91	3239.25	11214.21	13769.26	79075.43	79561.63	108495.46	21929.20	13948.29	5913.05	464.60	339020.34

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	4.59	0.00	0.00	68.86	40.79	0.00	0.00	0.00	0.00	7.11
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	60.72	1657.28	5277.41	2484.51	2755.93	3222.45	13499.72	5523.84	14080.27	2679.81	9.49	4508.66
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EUMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LACI	42.00	623.47	1271.18	4493.06	8975.07	31998.15	76453.83	53048.01	5950.34	991.87	802.71	2.83	12809.69
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28325.51	14234.74	0.00	0.00	3877.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	2.01	0.00	15.23	14.84	2.68	0.00	128.12	15.14	0.00	0.00	15.81
MYYU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12281.27	1173.81	0.00	0.00	1215.69
NYMA	1828.87	3317.37	6573.89	21072.09	30395.62	249974.84	453335.57	234065.93	10494.73	1466.61	14300.26	1486.40	69184.98
PAHE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4148.98	2225.86	0.00	0.00	580.99
TABR	16.36	123.00	2064.39	6533.54	4027.13	8128.21	35213.95	49330.91	6244.55	10806.20	1927.39	0.00	9607.97
TOTAL	1887.22	4124.57	11568.75	37380.70	45897.55	292871.96	568297.34	349985.36	73097.34	44994.50	19710.17	1498.71	101807.91
DAYS	31.00	20.00	28.00	30.00	30.00	27.00	14.00	31.00	30.00	31.00	30.00	31.00	333.00

Table 2 – Midstream Data

Midstream 2004

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	15.00	0.00	21.00	132.00	121.00	155.00	415.00	62.00	4.00	0.00	0.00	925.00
COTO	0.00	0.00	0.00	0.00	5.00	8.00	55.00	20.00	2.00	13.00	0.00	0.00	103.00
EPFU	0.00	0.00	0.00	2.00	45.00	36.00	35.00	157.00	47.00	2.00	0.00	0.00	324.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
LABL	0.00	0.00	0.00	0.00	2.00	1.00	0.00	1.00	2.00	1.00	0.00	0.00	7.00
LACI	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	4.00	0.00	0.00	0.00	5.00
LAXA	0.00	0.00	0.00	19.00	56.00	52.00	139.00	306.00	783.00	44.00	30.00	3.00	1432.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	2.00	0.00	86.00	283.00	571.00	1730.00	2617.00	3484.00	1377.00	5.00	1.00	10156.00
MYCI	0.00	0.00	0.00	0.00	1.00	4.00	1.00	7.00	5.00	1.00	0.00	0.00	19.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	0.00	0.00	4.00	73.00	201.00	519.00	1819.00	3380.00	551.00	15.00	2.00	6564.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	3.00	0.00	26.00	193.00	429.00	1992.00	1664.00	1798.00	369.00	6.00	1.00	6481.00
TABR	0.00	215.00	0.00	138.00	205.00	110.00	166.00	267.00	583.00	173.00	38.00	4.00	1899.00
TOTAL	0.00	235.00	0.00	296.00	995.00	1534.00	4792.00	7273.00	10152.00	2535.00	94.00	11.00	27917.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	150.00	0.00	184.00	1243.00	1303.00	1477.00	4847.00	625.00	37.00	0.00	0.00	9866.00
COTO	0.00	0.00	0.00	0.00	3.00	5.00	62.00	51.00	1.00	58.00	0.00	0.00	180.00
EPFU	0.00	0.00	0.00	33.00	367.00	378.00	445.00	2277.00	909.00	69.00	0.00	0.00	4478.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	9.00
LABL	0.00	0.00	0.00	0.00	1.00	29.00	0.00	6.00	42.00	22.00	0.00	0.00	100.00
LACI	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	47.00	0.00	0.00	0.00	51.00
LAXA	0.00	0.00	0.00	34.00	153.00	241.00	794.00	2726.00	7708.00	771.00	148.00	13.00	12588.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	31.00	0.00	160.00	1529.00	2489.00	8732.00	15918.00	36952.00	18649.00	1.00	0.00	84461.00
MYCI	0.00	0.00	0.00	0.00	2.00	10.00	0.00	36.00	90.00	14.00	0.00	0.00	152.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	0.00	0.00	36.00	1078.00	2334.00	7453.00	27665.00	62134.00	9105.00	108.00	2.00	109915.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	33.00	0.00	107.00	2173.00	3301.00	17500.00	16737.00	33639.00	6604.00	27.00	3.00	80124.00
TABR	0.00	1574.00	0.00	341.00	1152.00	459.00	1131.00	1856.00	7863.00	903.00	191.00	17.00	15487.00
TOTAL	0.00	1788.00	0.00	895.00	7701.00	10553.00	37594.00	72119.00	150021.00	36232.00	475.00	35.00	317413.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	5.00	0.00	20.00	127.00	120.00	149.00	213.00	58.00	4.00	0.00	0.00	696.00
COTO	0.00	0.00	0.00	0.00	5.00	8.00	33.00	16.00	2.00	12.00	0.00	0.00	76.00
EPFU	0.00	0.00	0.00	2.00	40.00	34.00	32.00	91.00	38.00	2.00	0.00	0.00	239.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
LABL	0.00	0.00	0.00	0.00	2.00	1.00	0.00	1.00	2.00	1.00	0.00	0.00	7.00
LACI	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	3.00	0.00	0.00	0.00	4.00
LAXA	0.00	0.00	0.00	17.00	54.00	49.00	119.00	236.00	464.00	37.00	25.00	3.00	1004.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	2.00	0.00	83.00	242.00	501.00	1396.00	1882.00	1789.00	687.00	5.00	1.00	6588.00
MYCI	0.00	0.00	0.00	0.00	1.00	4.00	1.00	6.00	4.00	1.00	0.00	0.00	17.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	0.00	0.00	4.00	73.00	191.00	480.00	1388.00	2266.00	478.00	15.00	2.00	4897.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	3.00	0.00	26.00	158.00	387.00	1611.00	1364.00	1103.00	271.00	6.00	1.00	4930.00
TABR	0.00	184.00	0.00	134.00	193.00	101.00	143.00	222.00	363.00	137.00	32.00	4.00	1513.00
TOTAL	0.00	194.00	0.00	286.00	895.00	1397.00	3964.00	5419.00	6094.00	1630.00	83.00	11.00	19973.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	29.41	0.00	76.92	409.68	400.00	480.65	687.10	193.33	12.90	0.00	0.00	226.71
COTO	0.00	0.00	0.00	0.00	16.13	26.67	106.45	51.61	6.67	38.71	0.00	0.00	24.76
EPFU	0.00	0.00	0.00	7.69	129.03	113.33	103.23	293.55	126.67	6.45	0.00	0.00	77.85
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.33
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.33
LABL	0.00	0.00	0.00	0.00	6.45	3.33	0.00	3.23	6.67	3.23	0.00	0.00	2.28
LACI	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	10.00	0.00	0.00	0.00	1.30
LAXA	0.00	0.00	0.00	65.38	174.19	163.33	383.87	761.29	1546.67	119.35	119.05	10.00	327.04
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	11.76	0.00	319.23	780.65	1670.00	4503.23	6070.97	5963.33	2216.13	23.81	3.33	2145.93
MYCI	0.00	0.00	0.00	0.00	3.23	13.33	3.23	19.35	13.33	3.23	0.00	0.00	5.54
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	0.00	0.00	15.38	235.48	636.67	1548.39	4477.42	7553.33	1541.94	71.43	6.67	1595.11
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	17.65	0.00	100.00	509.68	1290.00	5196.77	4400.00	3676.67	874.19	28.57	3.33	1605.86
TABR	0.00	1082.35	0.00	515.38	622.58	336.67	461.29	716.13	1210.00	441.94	152.38	13.33	492.83
TOTAL	0.00	1141.18	0.00	1100.00	2887.10	4656.67	12787.10	17480.65	20313.33	5258.06	395.24	36.67	6505.86
Days	23.00	17.00	6.00	26.00	31.00	30.00	31.00	31.00	30.00	31.00	21.00	30.00	307.00

Midstream 2005

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	7.00	83.00	239.00	77.00	38.00	15.00	0.00	0.00	0.00	459.00
COTO	0.00	0.00	1.00	0.00	1.00	9.00	3.00	5.00	4.00	0.00	0.00	0.00	23.00
EPFU	0.00	0.00	4.00	0.00	2.00	14.00	19.00	15.00	10.00	0.00	0.00	0.00	64.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	0.00	0.00	3.00
LACI	0.00	0.00	0.00	3.00	4.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	9.00
LAXA	0.00	0.00	6.00	1.00	10.00	10.00	36.00	19.00	0.00	0.00	0.00	0.00	82.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	1.00	3.00	23.00	20.00	159.00	515.00	1129.00	316.00	1122.00	912.00	0.00	0.00	4200.00
MYCI	0.00	0.00	0.00	0.00	3.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	7.00
MYTH	0.00	0.00	0.00	0.00	3.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	6.00
MYYU	0.00	1.00	10.00	23.00	91.00	163.00	606.00	635.00	1045.00	260.00	1.00	0.00	2835.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	6.00	1.00	8.00	25.00	116.00	211.00	554.00	233.00	242.00	53.00	0.00	0.00	1449.00
TABR	41.00	28.00	176.00	276.00	147.00	195.00	159.00	112.00	53.00	84.00	74.00	0.00	1345.00
TOTAL	48.00	33.00	228.00	355.00	619.00	1356.00	2587.00	1377.00	2492.00	1312.00	75.00	0.00	10482.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	73.00	325.00	938.00	280.00	170.00	74.00	0.00	0.00	0.00	1860.00
COTO	0.00	0.00	1.00	0.00	1.00	21.00	13.00	7.00	0.00	0.00	0.00	0.00	43.00
EPFU	0.00	0.00	23.00	0.00	9.00	143.00	169.00	107.00	47.00	0.00	0.00	0.00	498.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	7.00	10.00	0.00	0.00	0.00	0.00	17.00
LACI	0.00	0.00	0.00	19.00	17.00	0.00	3.00	8.00	0.00	0.00	0.00	0.00	47.00
LAXA	0.00	0.00	18.00	8.00	16.00	68.00	134.00	44.00	0.00	0.00	0.00	0.00	288.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	1.00	17.00	90.00	121.00	613.00	1374.00	2706.00	655.00	4255.00	4275.00	0.00	0.00	14107.00
MYCI	0.00	0.00	0.00	0.00	3.00	0.00	8.00	0.00	0.00	8.00	0.00	0.00	19.00
MYTH	0.00	0.00	0.00	0.00	11.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	15.00
MYYU	0.00	10.00	66.00	179.00	741.00	1392.00	4003.00	3264.00	8495.00	1945.00	16.00	0.00	20111.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	59.00	3.00	51.00	156.00	555.00	1301.00	2399.00	779.00	1109.00	283.00	0.00	0.00	6695.00
TABR	297.00	104.00	685.00	1229.00	619.00	909.00	604.00	558.00	205.00	194.00	199.00	0.00	5603.00
TOTAL	357.00	134.00	934.00	1785.00	2910.00	6146.00	10326.00	5606.00	14185.00	6705.00	215.00	0.00	49303.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	7.00	78.00	205.00	72.00	32.00	15.00	0.00	0.00	0.00	409.00
COTO	0.00	0.00	1.00	0.00	1.00	9.00	3.00	5.00	3.00	0.00	0.00	0.00	22.00
EPFU	0.00	0.00	4.00	0.00	2.00	14.00	18.00	15.00	10.00	0.00	0.00	0.00	63.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	0.00	0.00	3.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	0.00	0.00	3.00
LACI	0.00	0.00	0.00	3.00	4.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	9.00
LAXA	0.00	0.00	5.00	1.00	7.00	10.00	32.00	19.00	0.00	0.00	0.00	0.00	74.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	1.00	3.00	22.00	20.00	128.00	448.00	901.00	287.00	721.00	483.00	0.00	0.00	3014.00
MYCI	0.00	0.00	0.00	0.00	3.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	7.00
MYTH	0.00	0.00	0.00	0.00	3.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	6.00
MYYU	0.00	1.00	10.00	23.00	84.00	157.00	539.00	565.00	900.00	238.00	1.00	0.00	2518.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	6.00	1.00	8.00	23.00	113.00	198.00	468.00	224.00	201.00	45.00	0.00	0.00	1287.00
TABR	27.00	27.00	165.00	234.00	139.00	174.00	142.00	98.00	51.00	75.00	57.00	0.00	1189.00
TOTAL	34.00	32.00	215.00	311.00	562.00	1215.00	2179.00	1249.00	1902.00	844.00	58.00	0.00	8604.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	23.33	251.61	683.33	232.26	103.23	50.00	0.00	0.00	0.00	130.25
COTO	0.00	0.00	3.23	0.00	3.23	30.00	9.68	16.13	10.00	0.00	0.00	0.00	7.01
EPFU	0.00	0.00	12.90	0.00	6.45	46.67	58.06	48.39	33.33	0.00	0.00	0.00	20.06
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	3.23	6.45	0.00	0.00	0.00	0.00	0.96
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	3.23	6.45	0.00	0.00	0.00	0.00	0.96
LACI	0.00	0.00	0.00	10.00	12.90	0.00	3.23	3.23	0.00	0.00	0.00	0.00	2.87
LAXA	0.00	0.00	16.13	3.33	22.58	33.33	103.23	61.29	0.00	0.00	0.00	0.00	23.57
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	3.70	10.71	70.97	66.67	412.90	1493.33	2906.45	925.81	2403.33	1558.06	0.00	0.00	959.87
MYCI	0.00	0.00	0.00	0.00	9.68	0.00	6.45	0.00	0.00	6.45	0.00	0.00	2.23
MYTH	0.00	0.00	0.00	0.00	9.68	0.00	0.00	3.23	3.33	3.23	0.00	0.00	1.91
MYYU	0.00	3.57	32.26	76.67	270.97	523.33	1738.71	1822.58	3000.00	767.74	11.11	0.00	801.91
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	22.22	3.57	25.81	76.67	364.52	660.00	1509.68	722.58	670.00	145.16	0.00	0.00	409.87
TABR	100.00	96.43	532.26	780.00	448.39	580.00	458.06	316.13	170.00	241.94	633.33	0.00	378.66
TOTAL	125.93	114.29	693.55	1036.67	1812.90	4050.00	7029.03	4029.03	6340.00	2722.58	644.44	0.00	2739.17
Days	27.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	9.00	5.00	314.00

Midstream 2006

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	1.00	0.00	9.00	39.00	10.00	8.00	9.00	0.00	0.00	0.00	76.00
COTO	0.00	0.00	0.00	0.00	0.00	4.00	3.00	3.00	1.00	0.00	0.00	0.00	11.00
EPFU	0.00	0.00	0.00	0.00	1.00	7.00	1.00	1.00	10.00	0.00	0.00	0.00	20.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	2.00
LACI	0.00	0.00	0.00	0.00	1.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	4.00
LAXA	0.00	0.00	3.00	0.00	8.00	154.00	45.00	148.00	938.00	230.00	15.00	0.00	1541.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	1.00	1.00	29.00	3.00	52.00	565.00	388.00	815.00	3019.00	413.00	2.00	0.00	5288.00
MYCI	0.00	0.00	0.00	0.00	0.00	8.00	2.00	3.00	1.00	1.00	1.00	0.00	16.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	2.00	43.00	15.00	30.00	218.00	797.00	1500.00	5679.00	862.00	48.00	0.00	9194.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	23.00	31.00	7.00	75.00	790.00	370.00	366.00	955.00	267.00	32.00	0.00	2916.00
TABR	61.00	352.00	328.00	30.00	44.00	137.00	34.00	130.00	1014.00	339.00	119.00	1.00	2589.00
TOTAL	62.00	378.00	435.00	55.00	220.00	1923.00	1650.00	2977.00	11626.00	2113.00	217.00	1.00	21657.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	3.00	0.00	13.00	138.00	39.00	75.00	179.00	0.00	0.00	0.00	447.00
COTO	0.00	0.00	0.00	0.00	0.00	8.00	1.00	36.00	0.00	0.00	0.00	0.00	45.00
EPFU	0.00	0.00	0.00	0.00	23.00	56.00	3.00	31.00	238.00	0.00	0.00	0.00	351.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	4.00	0.00	0.00	13.00
LACI	0.00	0.00	0.00	0.00	2.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	16.00
LAXA	0.00	0.00	9.00	0.00	15.00	593.00	137.00	2154.00	18052.00	1853.00	46.00	0.00	22859.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	2.00	2.00	196.00	2.00	78.00	2524.00	2260.00	7313.00	43656.00	2924.00	10.00	0.00	58967.00
MYCI	0.00	0.00	0.00	0.00	0.00	4.00	17.00	2.00	1.00	1.00	0.00	0.00	25.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	5.00	388.00	156.00	187.00	1531.00	6627.00	23888.00	116295.00	7415.00	326.00	0.00	156818.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	158.00	199.00	62.00	475.00	7151.00	2504.00	4180.00	11116.00	2646.00	197.00	0.00	28688.00
TABR	303.00	2054.00	2056.00	140.00	230.00	763.00	185.00	1480.00	19645.00	1536.00	365.00	11.00	28768.00
TOTAL	305.00	2219.00	2851.00	360.00	1023.00	12777.00	11773.00	39173.00	209182.00	16379.00	944.00	11.00	296997.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	1.00	0.00	9.00	38.00	9.00	8.00	9.00	0.00	0.00	0.00	74.00
COTO	0.00	0.00	0.00	0.00	0.00	4.00	3.00	3.00	1.00	0.00	0.00	0.00	11.00
EPFU	0.00	0.00	0.00	0.00	1.00	6.00	1.00	1.00	7.00	0.00	0.00	0.00	16.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	2.00
LACI	0.00	0.00	0.00	0.00	1.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	4.00
LAXA	0.00	0.00	3.00	0.00	8.00	140.00	45.00	123.00	697.00	200.00	14.00	0.00	1230.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	1.00	1.00	23.00	3.00	48.00	496.00	282.00	542.00	1724.00	270.00	2.00	0.00	3392.00
MYCI	0.00	0.00	0.00	0.00	0.00	8.00	2.00	3.00	1.00	1.00	1.00	0.00	16.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	2.00	39.00	14.00	30.00	208.00	664.00	947.00	3085.00	690.00	48.00	0.00	5727.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	22.00	27.00	7.00	64.00	642.00	324.00	283.00	729.00	174.00	30.00	0.00	2302.00
TABR	55.00	253.00	214.00	26.00	43.00	132.00	34.00	116.00	670.00	246.00	95.00	1.00	1885.00
TOTAL	56.00	278.00	307.00	50.00	204.00	1675.00	1364.00	2029.00	6923.00	1582.00	190.00	1.00	14659.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	3.45	0.00	60.00	152.00	90.00	61.54	30.00	0.00	0.00	0.00	32.89
COTO	0.00	0.00	0.00	0.00	0.00	16.00	30.00	23.08	3.33	0.00	0.00	0.00	4.89
EPFU	0.00	0.00	0.00	0.00	6.67	24.00	10.00	7.69	23.33	0.00	0.00	0.00	7.11
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	3.23	0.00	0.00	0.89
LACI	0.00	0.00	0.00	0.00	6.67	0.00	0.00	23.08	0.00	0.00	0.00	0.00	1.78
LAXA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LANO	0.00	0.00	10.34	0.00	53.33	560.00	450.00	946.15	2323.33	645.16	87.50	0.00	546.67
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	5.26	4.35	79.31	75.00	320.00	1984.00	2820.00	4169.23	5746.67	870.97	12.50	0.00	1507.56
MYCI	0.00	0.00	0.00	0.00	0.00	32.00	20.00	23.08	3.33	3.23	6.25	0.00	7.11
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	8.70	134.48	350.00	200.00	832.00	6640.00	7284.62	10283.33	2225.81	300.00	0.00	2545.33
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	95.65	93.10	175.00	426.67	2568.00	3240.00	2176.92	2430.00	561.29	187.50	0.00	1023.11
TABR	289.47	1100.00	737.93	650.00	286.67	528.00	340.00	892.31	2233.33	793.55	593.75	10.00	837.78
TOTAL	294.74	1208.70	1058.62	1250.00	1360.00	6700.00	13640.00	15607.69	23076.67	5103.23	1187.50	10.00	70497.14
Days	19.00	23.00	29.00	4.00	15.00	25.00	10.00	13.00	30.00	31.00	16.00	10.00	225.00

Midstream 2007

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	1.00	13.00	39.00	34.00	37.00	34.00	13.00	2.00	0.00	0.00	173.00
COTO	0.00	0.00	1.00	0.00	2.00	23.00	46.00	1.00	0.00	1.00	0.00	0.00	74.00
EPFU	0.00	0.00	0.00	1.00	3.00	2.00	0.00	16.00	0.00	0.00	0.00	0.00	22.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	5.00	10.00	23.00	4.00	4.00	2.00	0.00	0.00	48.00
LACI	0.00	0.00	1.00	97.00	7.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	109.00
LAXA	0.00	2.00	279.00	360.00	533.00	333.00	49.00	792.00	62.00	12.00	0.00	0.00	2422.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	2.00	87.00	46.00	778.00	5141.00	2135.00	2093.00	1439.00	318.00	0.00	0.00	12039.00
MYCI	0.00	0.00	0.00	0.00	0.00	3.00	4.00	1.00	14.00	3.00	0.00	0.00	25.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
MYYU	2.00	25.00	108.00	202.00	174.00	337.00	919.00	3133.00	1883.00	364.00	0.00	0.00	7147.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	1.00	65.00	101.00	130.00	507.00	1113.00	468.00	503.00	478.00	67.00	0.00	0.00	3433.00
TABR	17.00	68.00	162.00	426.00	536.00	256.00	135.00	684.00	26.00	3.00	0.00	0.00	2313.00
Total	20.00	162.00	740.00	1275.00	2584.00	7252.00	3816.00	7264.00	3921.00	772.00	0.00	0.00	27806.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	6.00	29.00	123.00	158.00	263.00	122.00	110.00	7.00	0.00	0.00	818.00
COTO	0.00	0.00	1.00	0.00	1.00	79.00	311.00	0.00	0.00	0.00	0.00	0.00	392.00
EPFU	0.00	0.00	0.00	20.00	20.00	9.00	0.00	147.00	0.00	0.00	0.00	0.00	196.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	30.00	168.00	679.00	97.00	10.00	6.00	0.00	0.00	990.00
LACI	0.00	0.00	11.00	755.00	61.00	0.00	0.00	47.00	8.00	0.00	0.00	0.00	882.00
LAXA	0.00	4.00	1183.00	2222.00	3394.00	2122.00	395.00	7190.00	299.00	38.00	0.00	0.00	16847.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	2.00	1249.00	93.00	3845.00	23681.00	19163.00	23041.00	15822.00	4182.00	0.00	0.00	91078.00
MYCI	0.00	0.00	0.00	0.00	0.00	31.00	9.00	5.00	218.00	13.00	0.00	0.00	276.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	0.00	14.00
MYYU	24.00	120.00	450.00	1910.00	1265.00	3486.00	16402.00	35364.00	21264.00	5128.00	0.00	0.00	85413.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	776.00	847.00	1016.00	4365.00	12975.00	5615.00	3108.00	3905.00	577.00	0.00	0.00	33184.00
TABR	60.00	401.00	661.00	2774.00	3319.00	1669.00	1227.00	4514.00	101.00	22.00	0.00	0.00	14748.00
Total	84.00	1303.00	4408.00	8819.00	16423.00	44378.00	44064.00	73635.00	41751.00	9973.00	0.00	0.00	244838.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	1.00	13.00	39.00	34.00	35.00	34.00	12.00	2.00	0.00	0.00	170.00
COTO	0.00	0.00	1.00	0.00	2.00	20.00	26.00	1.00	0.00	1.00	0.00	0.00	51.00
EPFU	0.00	0.00	0.00	1.00	3.00	2.00	0.00	12.00	0.00	0.00	0.00	0.00	18.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	5.00	10.00	17.00	4.00	4.00	1.00	0.00	0.00	41.00
LACI	0.00	0.00	1.00	78.00	7.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	90.00
LAXA	0.00	2.00	169.00	299.00	396.00	266.00	41.00	509.00	59.00	12.00	0.00	0.00	1753.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	2.00	53.00	45.00	542.00	2127.00	933.00	1086.00	726.00	222.00	0.00	0.00	5736.00
MYCI	0.00	0.00	0.00	0.00	0.00	3.00	3.00	1.00	11.00	2.00	0.00	0.00	20.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
MYYU	1.00	25.00	104.00	196.00	170.00	320.00	675.00	2271.00	1613.00	304.00	0.00	0.00	5679.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	1.00	40.00	79.00	125.00	424.00	803.00	376.00	449.00	384.00	55.00	0.00	0.00	2736.00
TABR	17.00	64.00	141.00	347.00	440.00	231.00	117.00	549.00	26.00	3.00	0.00	0.00	1935.00
Total	19.00	133.00	549.00	1104.00	2028.00	3816.00	2223.00	4919.00	2837.00	602.00	0.00	0.00	18230.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	3.23	43.33	125.81	125.93	233.33	109.68	40.00	50.00	0.00	0.00	65.89
COTO	0.00	0.00	3.23	0.00	6.45	74.07	173.33	3.23	0.00	25.00	0.00	0.00	19.77
EPFU	0.00	0.00	0.00	3.33	9.68	7.41	0.00	38.71	0.00	0.00	0.00	0.00	6.98
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	16.13	37.04	113.33	12.90	13.33	25.00	0.00	0.00	15.89
LACI	0.00	0.00	3.23	260.00	22.58	0.00	0.00	9.68	3.33	0.00	0.00	0.00	34.88
LAXA	0.00	7.14	545.16	996.67	1277.42	985.19	273.33	1641.94	196.67	300.00	0.00	0.00	679.46
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	7.14	170.97	150.00	1748.39	7877.78	6220.00	3503.23	2420.00	5550.00	0.00	0.00	2223.26
MYCI	0.00	0.00	0.00	0.00	0.00	11.11	20.00	3.23	36.67	50.00	0.00	0.00	7.75
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.39
MYYU	3.23	89.29	335.48	653.33	548.39	1185.19	4500.00	7325.81	5376.67	7600.00	0.00	0.00	2201.16
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	3.23	142.86	254.84	416.67	1367.74	2974.07	2506.67	1448.39	1280.00	1375.00	0.00	0.00	1060.47
TABR	54.84	228.57	454.84	1156.67	1419.35	855.56	780.00	1770.97	86.67	75.00	0.00	0.00	750.00
Grand Total	61.29	475.00	1770.97	3680.00	6541.94	14133.33	14820.00	15867.74	9456.67	15050.00	0.00	0.00	7065.89
Days	31.00	28.00	31.00	30.00	31.00	27.00	15.00	31.00	30.00	4.00	0.00	0.00	258.00

Midstream 2008

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	11.00	3.00	0.00	26.00
COTO	0.00	0.00	0.00	0.00	15.00	2.00	6.00	1.00	0.00	0.00	0.00	0.00	24.00
EPFU	0.00	0.00	0.00	0.00	268.00	473.00	1072.00	474.00	529.00	1092.00	1162.00	0.00	5070.00
EUPE	0.00	0.00	0.00	0.00	3.00	0.00	13.00	1.00	7.00	0.00	0.00	0.00	24.00
IDPH	0.00	0.00	0.00	0.00	6.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	9.00
LABL	0.00	0.00	0.00	0.00	7.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	8.00
LACI	0.00	0.00	0.00	0.00	5.00	1.00	18.00	1.00	273.00	94.00	0.00	0.00	392.00
LAXA	0.00	0.00	0.00	0.00	9.00	5.00	8.00	0.00	0.00	0.00	42.00	0.00	64.00
LANO	0.00	0.00	0.00	0.00	47.00	4.00	6.00	0.00	3.00	10.00	131.00	0.00	201.00
MACA	0.00	0.00	0.00	0.00	2.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00
MYCA	0.00	0.00	0.00	0.00	51.00	14.00	39.00	17.00	12.00	1.00	6.00	0.00	140.00
MYCI	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
MYTH	0.00	0.00	0.00	0.00	2.00	0.00	3.00	24.00	37.00	28.00	0.00	0.00	94.00
MYYU	0.00	0.00	0.00	0.00	23.00	5.00	9.00	22.00	8.00	1.00	17.00	0.00	85.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	622.00	240.00	0.00	0.00	862.00
PAHE	0.00	0.00	0.00	0.00	66.00	4.00	25.00	16.00	5.00	8.00	29.00	0.00	153.00
TABR	0.00	0.00	0.00	0.00	286.00	47.00	46.00	32.00	59.00	1374.00	2131.00	0.00	3975.00
Total	0.00	0.00	0.00	0.00	791.00	556.00	1258.00	589.00	1556.00	2860.00	3521.00	0.00	11131.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00			329.00			529.00	244.00	0.00	1102.00
COTO	0.00	0.00	0.00	0.00	447.00	1736.00	334.00	606.00				0.00	3123.00
EPFU	0.00	0.00	0.00	0.00	13338.00	71416.00	355024.00	166293.00	53222.00	99597.00	83022.00	0.00	841912.00
EUPE	0.00	0.00	0.00	0.00	15.00		100.00	531.00	187.00			0.00	833.00
IDPH	0.00	0.00	0.00	0.00	283.00	8.00			94.00	18.00		0.00	403.00
LABL	0.00	0.00	0.00	0.00	445.00		706.00					0.00	1151.00
LACI	0.00	0.00	0.00	0.00	453.00	73.00	2966.00	15.00	24833.00	7534.00		0.00	35874.00
LAXA	0.00	0.00	0.00	0.00	733.00	344.00	676.00				6725.00	0.00	8478.00
LANO	0.00	0.00	0.00	0.00	2224.00	79.00	427.00		139.00	284.00	6356.00	0.00	9509.00
MACA	0.00	0.00	0.00	0.00	38.00			12.00				0.00	50.00
MYCA	0.00	0.00	0.00	0.00	7641.00	4729.00	31425.00	12264.00	1250.00	60.00	428.00	0.00	57797.00
MYCI	0.00	0.00	0.00	0.00	11.00							0.00	11.00
MYTH	0.00	0.00	0.00	0.00	164.00		2911.00	2515.00	5331.00	1274.00		0.00	12195.00
MYYU	0.00	0.00	0.00	0.00	2035.00	2598.00	8789.00	13513.00	793.00	319.00	1009.00	0.00	29056.00
NYMA	0.00	0.00	0.00	0.00					31708.00	10833.00		0.00	42541.00
PAHE	0.00	0.00	0.00	0.00	11906.00	2516.00	11974.00	13291.00	618.00	180.00	2493.00	0.00	42978.00
TABR	0.00	0.00	0.00	0.00	13320.00	1510.00	1988.00	5640.00	4414.00	70265.00	126792.00	0.00	223929.00
Total	0.00	0.00	0.00	0.00	53053.00	85009.00	417649.00	214680.00	122589.00	190893.00	227069.00	0.00	1310942.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	0.00	0.00	20.59	0.00	0.00	33.11	15.27	0.00	68.98
COTO	0.00	0.00	0.00	0.00	27.98	108.67	20.91	37.93	0.00	0.00	0.00	0.00	195.49
EPFU	0.00	0.00	0.00	0.00	834.93	4470.49	22223.72	10409.58	3331.58	6234.55	5197.00	0.00	52701.85
EUPE	0.00	0.00	0.00	0.00	0.94	0.00	6.26	33.24	11.71	0.00	0.00	0.00	52.14
IDPH	0.00	0.00	0.00	0.00	17.72	0.50	0.00	0.00	5.88	1.13	0.00	0.00	25.23
LABL	0.00	0.00	0.00	0.00	27.86	0.00	44.19	0.00	0.00	0.00	0.00	0.00	72.05
LACI	0.00	0.00	0.00	0.00	28.36	4.57	185.67	0.94	1554.49	471.61	0.00	0.00	2245.63
LAXA	0.00	0.00	0.00	0.00	45.88	21.53	42.32	0.00	0.00	0.00	420.97	0.00	530.70
LANO	0.00	0.00	0.00	0.00	139.22	4.95	26.73	0.00	8.70	17.78	397.87	0.00	595.24
MACA	0.00	0.00	0.00	0.00	2.38	0.00	0.00	0.75	0.00	0.00	0.00	0.00	3.13
MYCA	0.00	0.00	0.00	0.00	478.31	296.03	1967.14	767.70	78.25	3.76	26.79	0.00	3617.97
MYCI	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
MYTH	0.00	0.00	0.00	0.00	10.27	0.00	182.22	157.43	333.71	79.75	0.00	0.00	763.38
MYYU	0.00	0.00	0.00	0.00	127.39	162.63	550.17	845.88	49.64	19.97	63.16	0.00	1818.84
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1984.85	678.12	0.00	0.00	2662.97
PAHE	0.00	0.00	0.00	0.00	745.29	157.50	749.55	831.99	38.69	11.27	156.06	0.00	2690.33
TABR	0.00	0.00	0.00	0.00	833.80	94.52	124.44	353.05	276.31	4398.44	7936.90	0.00	14017.46
Total	0.00	0.00	0.00	0.00	3321.00	5321.38	26143.91	13438.50	7673.80	11949.48	14214.02	0.00	82062.10

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA			0.00	0.00	0.00	0.00	71.02	0.00	0.00	106.82	50.91	0.00	27.27
COTO			0.00	0.00	127.19	724.47	72.10	291.80	0.00	0.00	0.00	0.00	77.27
EPFU			0.00	0.00	3795.13	29803.23	76633.53	80073.67	10747.03	20111.46	17323.32	0.00	20830.77
EUPE			0.00	0.00	4.27	0.00	21.59	255.69	37.76	0.00	0.00	0.00	20.61
IDPH			0.00	0.00	80.52	3.34	0.00	0.00	18.98	3.63	0.00	0.00	9.97
LABL			0.00	0.00	126.62	0.00	152.39	0.00	0.00	0.00	0.00	0.00	28.48
LACI			0.00	0.00	128.89	30.46	640.22	7.22	5014.49	1521.33	0.00	0.00	887.60
LAXA			0.00	0.00	208.56	143.56	145.92	0.00	0.00	0.00	1403.23	0.00	209.76
LANO			0.00	0.00	632.81	32.97	92.17	0.00	28.07	57.35	1326.24	0.00	235.27
MACA			0.00	0.00	10.81	0.00	0.00	5.78	0.00	0.00	0.00	0.00	1.24
MYCA			0.00	0.00	2174.14	1973.50	6783.23	5905.38	252.41	12.12	89.31	0.00	1430.03
MYCI			0.00	0.00	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
MYTH			0.00	0.00	46.66	0.00	628.35	1211.03	1076.48	257.26	0.00	0.00	301.73
MYYU			0.00	0.00	579.03	1084.19	1897.15	6506.80	160.13	64.42	210.54	0.00	718.91
NYMA			0.00	0.00	0.00	0.00	0.00	0.00	6402.75	2187.49	0.00	0.00	1052.56
PAHE			0.00	0.00	3387.68	1049.97	2584.64	6399.90	124.79	36.35	520.19	0.00	1063.37
TABR			0.00	0.00	3790.01	630.15	429.12	2715.78	891.31	14188.50	26456.34	0.00	5540.50
Total			0.00	0.00	15095.46	35475.85	90151.42	103373.06	24754.20	38546.72	47380.07	0.00	32435.61
Days	0.00	0.00	20.00	31.00	22.00	15.00	29.00	13.00	31.00	31.00	30.00	31.00	253.00

Table 3 – Downstream Data

Downstream 2004

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	4.00	0.00	7.00	9.00	7.00	12.00	19.00	19.00	13.00	6.00	1.00	0.00	97.00
COTO	0.00	0.00	6.00	3.00	1.00	5.00	3.00	3.00	7.00	1.00	0.00	0.00	29.00
EPFU	0.00	1.00	21.00	81.00	36.00	101.00	4.00	29.00	89.00	0.00	0.00	0.00	362.00
EUPE	0.00	0.00	0.00	0.00	0.00	6.00	1.00	0.00	8.00	0.00	0.00	0.00	15.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	37.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	40.00
LACI	0.00	0.00	21.00	229.00	47.00	0.00	2.00	93.00	12.00	4.00	3.00	0.00	411.00
LAXA	0.00	0.00	85.00	32.00	42.00	64.00	63.00	1035.00	1873.00	235.00	116.00	12.00	3557.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
MYCA	3.00	126.00	296.00	200.00	568.00	664.00	509.00	909.00	1212.00	462.00	14.00	2.00	4965.00
MYCI	0.00	0.00	0.00	0.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	5.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
MYYU	8.00	5.00	222.00	70.00	82.00	255.00	961.00	3277.00	2912.00	494.00	22.00	3.00	8311.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	4.00
PAHE	5.00	53.00	1496.00	260.00	564.00	1022.00	2292.00	2740.00	2922.00	470.00	42.00	11.00	11877.00
TABR	62.00	246.00	1389.00	1698.00	989.00	995.00	641.00	1854.00	1638.00	276.00	336.00	48.00	10172.00
Grand Total	82.00	431.00	3580.00	2583.00	2339.00	3124.00	4498.00	9960.00	10687.00	1953.00	534.00	76.00	39847.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	20.00	0.00	122.00	42.00	54.00	137.00	231.00	237.00	147.00	35.00	5.00	0.00	1030.00
COTO	0.00	0.00	14.00	18.00	1.00	13.00	8.00	12.00	11.00	4.00	0.00	0.00	81.00
EPFU	0.00	3.00	301.00	1235.00	479.00	2075.00	72.00	656.00	2563.00	0.00	0.00	0.00	7384.00
EUPE	0.00	0.00	0.00	0.00	0.00	39.00	44.00	0.00	66.00	0.00	0.00	0.00	149.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	351.00	1.00	1.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	358.00
LACI	0.00	0.00	123.00	2260.00	342.00	0.00	11.00	2136.00	61.00	8.00	10.00	0.00	4951.00
LAXA	0.00	0.00	424.00	205.00	266.00	347.00	462.00	13255.00	30261.00	2438.00	1654.00	62.00	49374.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	0.00	6.00
MYCA	10.00	285.00	1583.00	879.00	2427.00	4326.00	2522.00	5138.00	9309.00	2643.00	133.00	0.00	29255.00
MYCI	0.00	0.00	0.00	0.00	9.00	0.00	3.00	42.00	2.00	0.00	0.00	0.00	56.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00	0.00	16.00
MYYU	75.00	50.00	3724.00	891.00	1561.00	3769.00	12820.00	51261.00	49462.00	7330.00	230.00	16.00	131189.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	0.00	0.00	13.00
PAHE	46.00	367.00	15106.00	1897.00	4438.00	10759.00	22763.00	31856.00	46127.00	4848.00	394.00	105.00	138706.00
TABR	471.00	1933.00	12160.00	15740.00	10265.00	10653.00	6103.00	26361.00	26798.00	2206.00	4132.00	246.00	117068.00
Grand Total	622.00	2638.00	33908.00	23168.00	19843.00	32118.00	45061.00	130954.00	164807.00	19530.00	6558.00	429.00	479636.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	3.00	0.00	5.00	8.00	7.00	11.00	19.00	19.00	13.00	6.00	1.00	0.00	92.00
COTO	0.00	0.00	6.00	3.00	1.00	5.00	3.00	3.00	7.00	1.00	0.00	0.00	29.00
EPFU	0.00	1.00	20.00	75.00	32.00	44.00	4.00	27.00	75.00	0.00	0.00	0.00	278.00
EUPE	0.00	0.00	0.00	0.00	0.00	5.00	1.00	0.00	7.00	0.00	0.00	0.00	13.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	35.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	38.00
LACI	0.00	0.00	17.00	179.00	35.00	0.00	2.00	76.00	9.00	4.00	3.00	0.00	325.00
LAXA	0.00	0.00	75.00	31.00	42.00	50.00	58.00	781.00	1110.00	188.00	79.00	12.00	2426.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
MYCA	3.00	50.00	258.00	176.00	428.00	612.00	484.00	805.00	1002.00	375.00	14.00	2.00	4209.00
MYCI	0.00	0.00	0.00	0.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	5.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
MYYU	8.00	5.00	171.00	67.00	80.00	239.00	900.00	2439.00	2357.00	461.00	22.00	3.00	6752.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	4.00
PAHE	5.00	30.00	743.00	191.00	469.00	854.00	1842.00	2191.00	1941.00	367.00	37.00	9.00	8679.00
TABR	55.00	205.00	1131.00	1430.00	871.00	763.00	566.00	1396.00	1246.00	254.00	219.00	45.00	8181.00
Grand Total	74.00	291.00	2461.00	2161.00	1968.00	2583.00	3882.00	7738.00	7768.00	1661.00	375.00	71.00	31033.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	11.54	0.00	16.13	26.67	22.58	36.67	61.29	61.29	43.33	19.35	3.33	0.00	25.48
COTO	0.00	0.00	19.35	10.00	3.23	16.67	9.68	9.68	23.33	3.23	0.00	0.00	8.03
EPFU	0.00	3.45	64.52	250.00	103.23	146.67	12.90	87.10	250.00	0.00	0.00	0.00	77.01
EUPE	0.00	0.00	0.00	0.00	0.00	16.67	3.23	0.00	23.33	0.00	0.00	0.00	3.60
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	112.90	3.33	3.23	0.00	0.00	0.00	0.00	3.23	0.00	0.00	10.53
LACI	0.00	0.00	54.84	596.67	112.90	0.00	6.45	245.16	30.00	12.90	10.00	0.00	90.03
LAXA	0.00	0.00	241.94	103.33	135.48	166.67	187.10	2519.35	3700.00	606.45	263.33	38.71	672.02
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	3.23	0.00	0.00	0.00	0.00	0.00	0.28
MYCA	11.54	172.41	832.26	586.67	1380.65	2040.00	1561.29	2596.77	3340.00	1209.68	46.67	6.45	1165.93
MYCI	0.00	0.00	0.00	0.00	6.45	0.00	3.23	3.23	3.33	0.00	0.00	0.00	1.39
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	3.23	0.00	0.00	0.00	0.00	0.00	0.28
MYYU	30.77	17.24	551.61	223.33	258.06	796.67	2903.23	7867.74	7856.67	1487.10	73.33	9.68	1870.36
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.90	0.00	0.00	1.11
PAHE	19.23	103.45	2396.77	636.67	1512.90	2846.67	5941.94	7067.74	6470.00	1183.87	123.33	29.03	2404.16
TABR	211.54	706.90	3648.39	4766.67	2809.68	2543.33	1825.81	4503.23	4153.33	819.35	730.00	145.16	2266.20
Grand Total	284.62	1003.45	7938.71	7203.33	6348.39	8610.00	12522.58	24961.29	25893.33	5358.06	1250.00	229.03	8596.40
Days	26.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	361.00

Downstream 2005

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	2.00	4.00	9.00	7.00	15.00	17.00	13.00	0.00	0.00	0.00	67.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	3.00	0.00	0.00	6.00
EPFU	0.00	9.00	18.00	8.00	3.00	4.00	6.00	11.00	27.00	18.00	2.00	0.00	106.00
EUPE	0.00	0.00	1.00	0.00	0.00	1.00	21.00	2.00	3.00	3.00	0.00	0.00	31.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	4.00
LACI	0.00	1.00	4.00	24.00	27.00	1.00	0.00	10.00	28.00	1.00	0.00	0.00	96.00
LAXA	0.00	1.00	5.00	3.00	10.00	27.00	15.00	14.00	27.00	13.00	3.00	1.00	119.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	5.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	2.00	4.00	103.00	125.00	180.00	319.00	401.00	228.00	609.00	524.00	22.00	5.00	2522.00
MYCI	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	3.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	1.00	11.00	48.00	66.00	280.00	456.00	737.00	1327.00	2308.00	741.00	239.00	26.00	6240.00
NYMA	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	7.00	0.00	0.00	0.00	11.00
PAHE	9.00	15.00	91.00	139.00	428.00	604.00	1251.00	1325.00	1165.00	332.00	316.00	12.00	5687.00
TABR	133.00	250.00	899.00	2910.00	1663.00	1134.00	765.00	1582.00	1185.00	1040.00	303.00	170.00	12034.00
Grand Total	145.00	292.00	1171.00	3281.00	2600.00	2554.00	3212.00	4519.00	5377.00	2681.00	885.00	214.00	26931.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	6.00	32.00	32.00	69.00	144.00	118.00	133.00	0.00	0.00	0.00	534.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	17.00	4.00	5.00	7.00	0.00	0.00	33.00
EPFU	0.00	62.00	205.00	149.00	52.00	26.00	57.00	159.00	267.00	170.00	8.00	0.00	1155.00
EUPE	0.00	0.00	7.00	0.00	0.00	8.00	177.00	7.00	80.00	37.00	0.00	0.00	316.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	13.00	5.00	0.00	0.00	22.00
LACI	0.00	1.00	55.00	227.00	229.00	2.00	0.00	58.00	192.00	14.00	0.00	0.00	778.00
LAXA	0.00	6.00	41.00	5.00	121.00	151.00	90.00	43.00	113.00	47.00	13.00	4.00	634.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.00	0.00	0.00	57.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	8.00	26.00	662.00	422.00	686.00	1115.00	1355.00	692.00	2436.00	2640.00	81.00	24.00	10147.00
MYCI	0.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00	83.00	0.00	0.00	0.00	96.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	13.00	113.00	481.00	1038.00	3590.00	6211.00	7660.00	13587.00	32724.00	9792.00	3047.00	358.00	78614.00
NYMA	0.00	0.00	0.00	4.00	0.00	3.00	0.00	17.00	149.00	0.00	0.00	0.00	173.00
PAHE	66.00	131.00	1003.00	1216.00	4209.00	6260.00	12094.00	11313.00	13662.00	2905.00	2308.00	124.00	55291.00
TABR	947.00	1749.00	8277.00	28253.00	13825.00	10086.00	6712.00	12920.00	12770.00	8172.00	2533.00	1101.00	107345.00
Grand Total	1034.00	2101.00	10737.00	31350.00	22744.00	23931.00	28306.00	38918.00	62627.00	23846.00	7990.00	1611.00	255195.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	2.00	4.00	7.00	7.00	15.00	15.00	12.00	0.00	0.00	0.00	62.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	3.00	0.00	0.00	6.00
EPFU	0.00	9.00	17.00	8.00	3.00	4.00	6.00	10.00	27.00	17.00	2.00	0.00	103.00
EUPE	0.00	0.00	1.00	0.00	0.00	1.00	9.00	2.00	3.00	3.00	0.00	0.00	19.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	0.00	4.00
LACI	0.00	1.00	4.00	23.00	24.00	1.00	0.00	8.00	28.00	1.00	0.00	0.00	90.00
LAXA	0.00	1.00	5.00	3.00	8.00	26.00	14.00	14.00	26.00	13.00	3.00	1.00	114.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	2.00	4.00	77.00	115.00	173.00	297.00	364.00	218.00	548.00	457.00	22.00	5.00	2282.00
MYCI	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	3.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	1.00	11.00	46.00	62.00	254.00	432.00	682.00	1217.00	1976.00	691.00	202.00	26.00	5600.00
NYMA	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	6.00	0.00	0.00	0.00	10.00
PAHE	9.00	14.00	70.00	126.00	372.00	534.00	1056.00	1214.00	883.00	225.00	152.00	9.00	4664.00
TABR	114.00	233.00	783.00	2144.00	1331.00	892.00	625.00	1305.00	1026.00	776.00	268.00	124.00	9621.00
Grand Total	126.00	274.00	1005.00	2487.00	2172.00	2195.00	2772.00	4006.00	4540.00	2188.00	649.00	165.00	22579.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	6.45	13.33	22.58	23.33	60.00	48.39	40.00	0.00	0.00	0.00	17.27
COTO	0.00	0.00	0.00	0.00	0.00	0.00	4.00	3.23	3.33	9.68	0.00	0.00	1.67
EPFU	0.00	32.14	54.84	26.67	9.68	13.33	24.00	32.26	90.00	54.84	6.67	0.00	28.69
EUPE	0.00	0.00	3.23	0.00	0.00	3.33	36.00	6.45	10.00	9.68	0.00	0.00	5.29
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	3.33	0.00	0.00	0.00	0.00	6.67	3.23	0.00	0.00	1.11
LACI	0.00	3.57	12.90	76.67	77.42	3.33	0.00	25.81	93.33	3.23	0.00	0.00	25.07
LAXA	0.00	3.57	16.13	10.00	25.81	86.67	56.00	45.16	86.67	41.94	10.00	3.23	31.75
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	6.45	14.29	248.39	383.33	558.06	990.00	1456.00	703.23	1826.67	1474.19	73.33	16.13	635.65
MYCI	0.00	3.57	0.00	0.00	0.00	0.00	0.00	0.00	6.67	0.00	0.00	0.00	0.84
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	3.23	39.29	148.39	206.67	819.35	1440.00	2728.00	3925.81	6586.67	2229.03	673.33	83.87	1559.89
NYMA	0.00	0.00	0.00	3.33	0.00	3.33	0.00	6.45	20.00	0.00	0.00	0.00	2.79
PAHE	29.03	50.00	225.81	420.00	1200.00	1780.00	4224.00	3916.13	2943.33	725.81	506.67	29.03	1299.16
TABR	367.74	832.14	2525.81	7146.67	4293.55	2973.33	2500.00	4209.68	3420.00	2503.23	893.33	400.00	2679.94
Grand Total	406.45	978.57	3241.94	8290.00	7006.45	7316.67	11088.00	12922.58	15133.33	7058.06	2163.33	532.26	6289.42
Days	31.00	28.00	31.00	30.00	31.00	30.00	25.00	31.00	30.00	31.00	30.00	31.00	359.00

Downstream 2006

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	1.00	1.00	8.00	7.00	14.00	8.00	3.00	0.00	0.00	0.00	42.00
COTO	0.00	1.00	0.00	0.00	0.00	7.00	1.00	2.00	0.00	0.00	0.00	0.00	11.00
EPFU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00	0.00	0.00	0.00	6.00
EUPE	0.00	0.00	0.00	1.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
LACI	0.00	3.00	0.00	161.00	71.00	0.00	0.00	35.00	4.00	0.00	0.00	0.00	274.00
LAXA	2.00	11.00	97.00	56.00	66.00	35.00	15.00	340.00	117.00	0.00	0.00	0.00	739.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	21.00	38.00	58.00	436.00	447.00	425.00	216.00	877.00	229.00	0.00	0.00	0.00	2747.00
MYCI	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	5.00	58.00	443.00	583.00	940.00	1336.00	2044.00	7454.00	1128.00	0.00	0.00	0.00	13991.00
NYMA	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
PAHE	36.00	60.00	103.00	270.00	1056.00	1964.00	2221.00	3147.00	796.00	0.00	0.00	0.00	9653.00
TABR	2612.00	2520.00	636.00	825.00	2523.00	1495.00	640.00	1326.00	735.00	0.00	0.00	0.00	13312.00
Grand Total	2676.00	2691.00	1338.00	2334.00	5118.00	5271.00	5151.00	13192.00	3016.00	0.00	0.00	0.00	40787.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	3.00	23.00	85.00	105.00	245.00	50.00	45.00	0.00	0.00	0.00	556.00
COTO	0.00	8.00	0.00	0.00	0.00	50.00	4.00	23.00	0.00	0.00	0.00	0.00	85.00
EPFU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	107.00	148.00	0.00	0.00	0.00	255.00
EUPE	0.00	0.00	0.00	7.00	20.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	42.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	9.00
LACI	0.00	57.00	0.00	945.00	663.00	0.00	0.00	583.00	52.00	0.00	0.00	0.00	2300.00
LAXA	4.00	69.00	1464.00	302.00	359.00	485.00	115.00	3233.00	1019.00	0.00	0.00	0.00	7050.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	227.00	243.00	321.00	1908.00	1940.00	1740.00	606.00	4034.00	1865.00	0.00	0.00	0.00	12884.00
MYCI	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	29.00	610.00	3482.00	5798.00	12482.00	12452.00	18422.00	110047.00	14328.00	0.00	0.00	0.00	177650.00
NYMA	0.00	0.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.00
PAHE	532.00	626.00	1024.00	4227.00	14537.00	25828.00	23897.00	45071.00	12496.00	0.00	0.00	0.00	128238.00
TABR	33484.00	29809.00	6240.00	9992.00	29752.00	20548.00	5965.00	19583.00	13100.00	0.00	0.00	0.00	168473.00
Grand Total	34276.00	31422.00	12534.00	23205.00	59859.00	61223.00	49254.00	182731.00	43062.00	0.00	0.00	0.00	497566.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	1.00	1.00	6.00	7.00	14.00	8.00	3.00	0.00	0.00	0.00	40.00
COTO	0.00	1.00	0.00	0.00	0.00	7.00	1.00	2.00	0.00	0.00	0.00	0.00	11.00
EPFU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00	0.00	0.00	0.00	6.00
EUPE	0.00	0.00	0.00	1.00	3.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
LACI	0.00	2.00	0.00	140.00	65.00	0.00	0.00	29.00	4.00	0.00	0.00	0.00	240.00
LAXA	1.00	10.00	61.00	47.00	60.00	31.00	14.00	309.00	89.00	0.00	0.00	0.00	622.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	17.00	33.00	55.00	286.00	405.00	386.00	202.00	833.00	203.00	0.00	0.00	0.00	2420.00
MYCI	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	5.00	51.00	413.00	483.00	844.00	1235.00	1770.00	5719.00	912.00	0.00	0.00	0.00	11432.00
NYMA	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00
PAHE	25.00	51.00	74.00	210.00	840.00	1406.00	1672.00	2354.00	569.00	0.00	0.00	0.00	7201.00
TABR	1549.00	1618.00	518.00	616.00	1917.00	1045.00	538.00	1067.00	507.00	0.00	0.00	0.00	9375.00
Grand Total	1597.00	1766.00	1122.00	1785.00	4143.00	4119.00	4211.00	10324.00	2291.00	0.00	0.00	0.00	31358.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	3.23	5.26	19.35	23.33	58.33	25.81	15.00	0.00	0.00	0.00	17.17
COTO	0.00	6.25	0.00	0.00	0.00	23.33	4.17	6.45	0.00	0.00	0.00	0.00	4.72
EPFU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.68	15.00	0.00	0.00	0.00	2.58
EUPE	0.00	0.00	0.00	5.26	9.68	6.67	0.00	0.00	0.00	0.00	0.00	0.00	2.58
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.43
LACI	0.00	12.50	0.00	736.84	209.68	0.00	0.00	93.55	20.00	0.00	0.00	0.00	103.00
LAXA	3.23	62.50	196.77	247.37	193.55	103.33	58.33	996.77	445.00	0.00	0.00	0.00	266.95
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	54.84	206.25	177.42	1505.26	1306.45	1286.67	841.67	2687.10	1015.00	0.00	0.00	0.00	1038.63
MYCI	0.00	0.00	0.00	5.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	16.13	318.75	1332.26	2542.11	2722.58	4116.67	7375.00	18448.39	4560.00	0.00	0.00	0.00	4906.44
NYMA	0.00	0.00	0.00	0.00	9.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29
PAHE	80.65	318.75	238.71	1105.26	2709.68	4686.67	6966.67	7593.55	2845.00	0.00	0.00	0.00	3090.56
TABR	4996.77	10112.50	1670.97	3242.11	6183.87	3483.33	2241.67	3441.94	2535.00	0.00	0.00	0.00	4023.61
Grand Total	5151.61	11037.50	3619.35	9394.74	13364.52	13730.00	17545.83	33303.23	11455.00	0.00	0.00	0.00	13458.37
Days	31.00	16.00	31.00	19.00	31.00	30.00	24.00	31.00	20.00	0.00	0.00	0.00	233.00

Downstream 2007

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	0.00	5.00	12.00	0.00	3.00	0.00	0.00	0.00	20.00
COTO	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
EPFU	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	6.00	0.00	0.00	0.00	12.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92.00	4.00	0.00	0.00	96.00
LACI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	14.00	9.00	0.00	0.00	30.00
LAXA	0.00	0.00	0.00	0.00	0.00	375.00	258.00	74.00	559.00	23.00	0.00	0.00	1289.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	265.00	612.00	128.00	368.00	280.00	0.00	0.00	1653.00
MYCI	0.00	0.00	0.00	0.00	0.00	10.00	31.00	0.00	4.00	0.00	0.00	0.00	45.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	0.00	0.00	0.00	0.00	390.00	1075.00	855.00	1717.00	509.00	0.00	3.00	4549.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	0.00	0.00	0.00	0.00	1965.00	3906.00	704.00	2856.00	718.00	0.00	0.00	10149.00
TABR	0.00	0.00	0.00	0.00	0.00	1579.00	6207.00	3784.00	2935.00	225.00	2.00	6.00	14738.00
Grand Total	0.00	0.00	0.00	0.00	0.00	4596.00	12101.00	5552.00	8554.00	1768.00	2.00	9.00	32582.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	0.00	19.00	127.00	0.00	69.00	0.00	0.00	0.00	215.00
COTO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPFU	0.00	0.00	0.00	0.00	0.00	37.00	0.00	0.00	216.00	0.00	0.00	0.00	253.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	804.00	216.00	0.00	0.00	1020.00
LACI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.00	260.00	243.00	0.00	0.00	526.00
LAXA	0.00	0.00	0.00	0.00	0.00	2981.00	1884.00	693.00	3787.00	185.00	0.00	0.00	9530.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	1253.00	3528.00	770.00	3061.00	3392.00	0.00	0.00	12004.00
MYCI	0.00	0.00	0.00	0.00	0.00	452.00	914.00	0.00	5.00	0.00	0.00	0.00	1371.00
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	0.00	0.00	0.00	0.00	2634.00	10238.00	6896.00	24625.00	8285.00	0.00	12.00	52690.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	0.00	0.00	0.00	0.00	23507.00	55401.00	6280.00	51623.00	19182.00	0.00	0.00	155993.00
TABR	0.00	0.00	0.00	0.00	0.00	12623.00	60074.00	38942.00	42227.00	5437.00	4.00	43.00	159350.00
Grand Total	0.00	0.00	0.00	0.00	0.00	43506.00	132166.00	53604.00	126677.00	36940.00	4.00	55.00	392952.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	0.00	5.00	12.00	0.00	3.00	0.00	0.00	0.00	20.00
COTO	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
EPFU	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	5.00	0.00	0.00	0.00	11.00
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.00	2.00	0.00	0.00	63.00
LACI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	10.00	6.00	0.00	0.00	22.00
LAXA	0.00	0.00	0.00	0.00	0.00	227.00	155.00	55.00	400.00	21.00	0.00	0.00	858.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	228.00	552.00	121.00	345.00	201.00	0.00	0.00	1447.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	0.00	0.00	7.00	21.00	0.00	4.00	0.00	0.00	0.00	32.00
MYYU	0.00	0.00	0.00	0.00	0.00	348.00	887.00	646.00	1231.00	367.00	0.00	3.00	3482.00
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	0.00	0.00	0.00	0.00	1004.00	2149.00	494.00	1549.00	345.00	0.00	0.00	5541.00
TABR	0.00	0.00	0.00	0.00	0.00	774.00	2668.00	1695.00	1590.00	155.00	2.00	4.00	6888.00
Grand Total	0.00	0.00	0.00	0.00	0.00	2600.00	6444.00	3017.00	5198.00	1097.00	2.00	7.00	18365.00

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	0.00	0.00	0.00	0.00	38.46	48.00	0.00	14.29	0.00	0.00	0.00	15.38
COTO	0.00	0.00	0.00	0.00	0.00	7.69	0.00	0.00	0.00	0.00	0.00	0.00	0.77
EPFU	0.00	0.00	0.00	0.00	0.00	46.15	0.00	0.00	23.81	0.00	0.00	0.00	8.46
EUPE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	290.48	6.45	0.00	0.00	48.46
LACI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.55	47.62	19.35	0.00	0.00	16.92
LAXA	0.00	0.00	0.00	0.00	0.00	1746.15	620.00	500.00	1904.76	67.74	0.00	0.00	660.00
LANO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	0.00	0.00	0.00	0.00	1753.85	2208.00	1100.00	1642.86	648.39	0.00	0.00	1113.08
MYCI	0.00	0.00	0.00	0.00	0.00	53.85	84.00	0.00	19.05	0.00	0.00	0.00	24.62
MYTH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYYU	0.00	0.00	0.00	0.00	0.00	2676.92	3548.00	5872.73	5861.90	1183.87	0.00	30.00	2678.46
NYMA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAHE	0.00	0.00	0.00	0.00	0.00	7723.08	8596.00	4490.91	7376.19	1112.90	0.00	0.00	4262.31
TABR	0.00	0.00	0.00	0.00	0.00	5953.85	10672.00	15409.09	7571.43	500.00	10.53	40.00	5298.46
Grand Total	0.00	0.00	0.00	0.00	0.00	20000.00	25776.00	27427.27	24752.38	3538.71	10.53	70.00	14126.92
Days	0.00	0.00	0.00	0.00	0.00	13.00	25.00	11.00	21.00	31.00	19.00	10.00	130.00

Downstream 2008

Files

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	19.00	3.00	19.00	59.00	175.00	592.00	651.00	0.00	0.00	0.00	0.00	1518.00
COTO	0.00	2.00	4.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	7.00
EPFU	0.00	62.00	1594.00	2662.00	2120.00	3418.00	9484.00	4852.00	0.00	0.00	0.00	0.00	24192.00
EUPE	0.00	3.00	0.00	2.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00
LACI	0.00	4.00	29.00	62.00	91.00	29.00	5.00	1.00	0.00	0.00	0.00	0.00	221.00
LAXA	0.00	438.00	80.00	27.00	42.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	599.00
LANO	0.00	0.00	83.00	7.00	1.00	1.00	11.00	44.00	0.00	0.00	0.00	0.00	147.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	160.00	908.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1068.00
MYCI	0.00	0.00	1240.00	374.00	18.00	280.00	973.00	286.00	0.00	0.00	0.00	0.00	3171.00
MYTH	0.00	0.00	0.00	0.00	1.00	0.00	2.00	1.00	0.00	0.00	0.00	0.00	4.00
MYYU	0.00	136.00	1179.00	11.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	1329.00
NYMA	1.00	838.00	151.00	8.00	3.00	9.00	0.00	3.00	0.00	0.00	0.00	0.00	1013.00
PAHE	0.00	84.00	341.00	41.00	43.00	4401.00	9790.00	4752.00	4125.00	4715.00	1115.00	44.00	29451.00
TABR	4.00	1818.00	2941.00	398.00	659.00	2299.00	5145.00	3042.00	0.00	0.00	0.00	0.00	16306.00
Grand Total	5.00	3564.00	8553.00	3612.00	3038.00	10625.00	26004.00	13635.00	4125.00	4715.00	1115.00	44.00	79035.00

Calls

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	265.00	84.00	1335.00	5744.00	28926.00	82826.00	100540.00	0.00	0.00	0.00	0.00	219720.00
COTO	0.00	7.00	93.00	0.00	0.00	0.00	122.00	0.00	0.00	0.00	0.00	0.00	222.00
EPFU	0.00	3813.00	58021.00	106921.00	81246.00	318009.00	859158.00	431348.00	0.00	0.00	0.00	0.00	1858516.00
EUPE	0.00	149.00	0.00	18.00	4.00	543.00	0.00	0.00	0.00	0.00	0.00	0.00	714.00
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	29.00	0.00	0.00	37.00	0.00	0.00	0.00	0.00	0.00	66.00
LACI	0.00	465.00	367.00	2373.00	2075.00	633.00	130.00	30.00	0.00	0.00	0.00	0.00	6073.00
LAXA	0.00	8525.00	1092.00	4184.00	95.00	13.00	2280.00	4428.00	0.00	0.00	0.00	0.00	20617.00
LANO	0.00	0.00	1141.00	763.00	874.00	202.00	0.00	0.00	0.00	0.00	0.00	0.00	2980.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	1182.00	104927.00	57301.00	10269.00	59546.00	109544.00	37386.00	0.00	0.00	0.00	0.00	380155.00
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	0.00	54.00	0.00	163.00	312.00	0.00	0.00	0.00	0.00	529.00
MYYU	0.00	1226.00	9972.00	547.00	0.00	0.00	0.00	387.00	0.00	0.00	0.00	0.00	12132.00
NYMA	11.00	62281.00	3062.00	590.00	98.00	734.00	0.00	301.00	0.00	0.00	0.00	0.00	67077.00
PAHE	0.00	848.00	15405.00	12501.00	44464.00	934055.00	854290.00	461446.00	146528.00	181794.00	38069.00	1403.00	2690803.00
TABR	10.00	25792.00	27890.00	9904.00	16257.00	211084.00	492894.00	294670.00	0.00	0.00	0.00	0.00	1078501.00
Grand Total	21.00	104553.00	222054.00	196466.00	161180.00	1553745.00	2401444.00	1330848.00	146528.00	181794.00	38069.00	1403.00	6338105.00

Minutes

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	6.19	5.26	83.57	359.56	1810.70	5184.73	6293.58	0.00	0.00	0.00	0.00	13743.59
COTO	0.00	1.00	6.82	0.00	0.00	0.00	7.64	0.00	0.00	0.00	0.00	0.00	15.46
EPFU	0.00	238.69	3631.99	6693.02	5085.82	19906.67	53781.41	27001.44	0.00	0.00	0.00	0.00	116339.03
EUPE	0.00	9.20	0.00	1.13	0.25	33.99	0.00	0.00	0.00	0.00	0.00	0.00	44.57
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	1.82	0.00	0.00	2.32	0.00	0.00	0.00	0.00	0.00	4.13
LACI	0.00	29.11	20.28	148.54	129.89	39.62	8.14	1.88	0.00	0.00	0.00	0.00	377.46
LAXA	0.00	123.00	82.72	261.91	5.95	0.81	142.72	277.18	0.00	0.00	0.00	0.00	894.29
LANO	0.00	0.00	77.89	47.76	54.71	12.64	0.00	0.00	0.00	0.00	0.00	0.00	193.00
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	67.00	6756.70	3586.92	642.82	3727.45	6857.21	2340.28	0.00	0.00	0.00	0.00	23978.38
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	0.00	3.38	0.00	10.20	19.53	0.00	0.00	0.00	0.00	33.11
MYYU	0.00	63.00	719.75	34.24	0.00	0.00	0.00	24.23	0.00	0.00	0.00	0.00	841.22
NYMA	0.69	3898.65	191.67	36.93	6.13	45.95	0.00	18.84	0.00	0.00	0.00	0.00	4198.87
PAHE	0.00	33.00	924.41	782.54	2783.35	58469.80	53476.68	28885.51	9172.33	11379.91	2383.04	87.82	168378.38
TABR	2.00	1055.10	1666.91	619.97	1017.65	13213.40	30854.08	18445.70	0.00	0.00	0.00	0.00	66874.81
Grand Total	2.69	5523.94	14084.39	12298.34	10089.51	97261.03	150325.13	83308.17	9172.33	11379.91	2383.04	87.82	395916.30

IA

Species	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ANPA	0.00	44.21	23.90	278.56	1159.88	6035.68	16724.92	20301.88	0.00	0.00	0.00	0.00	4294.87
COTO	0.00	7.14	31.01	0.00	0.00	0.00	24.64	0.00	0.00	0.00	0.00	0.00	4.83
EPFU	0.00	1704.90	16509.03	22310.07	16405.88	66355.56	173488.41	87101.42	0.00	0.00	0.00	0.00	36355.95
EUPE	0.00	65.71	0.00	3.76	0.81	113.30	0.00	0.00	0.00	0.00	0.00	0.00	13.93
IDPH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LABL	0.00	0.00	0.00	6.05	0.00	0.00	7.47	0.00	0.00	0.00	0.00	0.00	1.29
LACI	0.00	207.91	92.16	495.15	419.00	132.08	26.25	6.06	0.00	0.00	0.00	0.00	117.96
LAXA	0.00	878.57	375.99	873.03	19.18	2.71	460.40	894.14	0.00	0.00	0.00	0.00	279.47
LANO	0.00	0.00	354.03	159.21	176.49	42.15	0.00	0.00	0.00	0.00	0.00	0.00	60.31
MACA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYCA	0.00	478.57	30712.26	11956.39	2073.60	12424.83	22120.05	7549.30	0.00	0.00	0.00	0.00	7493.24
MYCI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MYTH	0.00	0.00	0.00	0.00	10.90	0.00	32.91	63.00	0.00	0.00	0.00	0.00	10.35
MYYU	0.00	450.00	3271.59	114.14	0.00	0.00	0.00	78.15	0.00	0.00	0.00	0.00	262.88
NYMA	2.75	27847.53	871.25	123.11	19.79	153.16	0.00	60.78	0.00	0.00	0.00	0.00	1312.15
PAHE	0.00	235.71	4201.86	2608.45	8978.55	194899.32	172505.43	93179.06	65516.66	36709.37	7943.45	283.31	52618.24
TABR	8.00	7536.43	7576.86	2066.56	3282.75	44044.65	99529.30	59502.25	0.00	0.00	0.00	0.00	20898.38
Grand Total	10.75	39456.69	64019.94	40994.47	32546.82	324203.44	484919.78	268736.03	65516.66	36709.37	7943.45	283.31	123723.84
Days	25.00	14.00	22.00	30.00	31.00	30.00	31.00	31.00	14.00	31.00	30.00	31.00	320.00

Appendix F

Two Years of Raw Capture Data

Table 1 – Capture Site Data

Year	Month	Site	Species	Total
2008	June	Pabco	Antrozous Pallidus, Pallid Bat	13
2008	June	Pabco	Lasiurus Xanthinus, Wester Yellow Bat	1
2008	June	Nature Preserve	Parastrellus Hesperus, Canyon bat	3
2008	June	Nature Preserve	Antrozous Pallidus, Pallid Bat	2
2008	June	Nature Preserve	Lasiurus Xanthinus, Wester Yellow Bat	1
2008	July	Nature Preserve	Parastrellus Hesperus, Canyon bat	1
2008	July	Nature Preserve	Tadarida brasiliensis, Mexica Free-tailed bat	2
2008	July	Nature Preserve	Myotis ciliolabrum, Western small footed bat	1
2008	July	Nature Preserve	Myostis Cal/Cil	1
2008	July	Pabco	Antrozous Pallidus, Pallid Bat	2
2008	July	Pabco	Myotis californicus, California myotis	1
2008	July	Pabco	Lasiurus Xanthinus, Wester Yellow Bat	1
2008	July	LLVMW	Parastrellus Hesperus, Canyon bat	1
2008	July	LLVMW	Myotis californicus, California myotis	3
2008	July	LLVMW	Antrozous Pallidus, Pallid Bat	1
2008	July	LLVMW	Myotis yumanensis, Yuma myotis	1
2008	August	LLVMW	Myotis yumanensis, Yuma myotis	8
2008	August	LLVMW	Myotis californicus, California myotis	1
2008	September	Nature Preserve	Myotis yumanensis, Yuma myotis	1
2008	September	Nature Preserve	Myotis californicus, California myotis	1
2008	September	Pabco	Myotis yumanensis, Yuma myotis	1
2008	September	Pabco	Myotis californicus, California myotis	3
2008	September	Pabco	Tadarida brasiliensis, Mexica Free-tailed bat	1
2008	September	Cottonwood Cell	Antrozous Pallidus, Pallid Bat	1
2008	September	LLVMW	Myotis ciliolabrum, Western small footed bat	4
2008	September	LLVMW	Myotis yumanensis, Yuma myotis	5
2008	September	LLVMW	Myotis californicus, California myotis	6
2008	October	LLVMW	Myotis yumanensis, Yuma myotis	3
2009	April	Pabco	Antrozous Pallidus, Pallid Bat	1
2009	May	Nature Preserve	Myotis yumanensis, Yuma myotis	1
2009	May	Pabco	Antrozous Pallidus, Pallid Bat	9
2009	May	Cottonwood Cell	Antrozous Pallidus, Pallid Bat	1
2009	May	LLVMW	Myotis yumanensis, Yuma myotis	3
2009	May	LLVMW	Myostis Cal/Cil	2
2009	June	Nature preserve	Antrozous Pallidus, Pallid Bat	1
2009	June	Nature preserve	Myotis yumanensis, Yuma myotis	1
2009	June	Pabco	Antrozous Pallidus, Pallid Bat	11
2009	June	Cottonwood Cell	Antrozous Pallidus, Pallid Bat	3
2009	July	Nature Preserve	Myotis yumanensis, Yuma myotis	7
2009	July	Pabco	Antrozous Pallidus, Pallid Bat	12
2009	July	Cottonwood Cell	Antrozous Pallidus, Pallid Bat	1
2009	July	Cottonwood Cell	Myostis Cal/Cil	1
2009	July	LLVWM	Myotis yumanensis, Yuma myotis	37
2009	July	LLVWM	Parastrellus Hesperus, Canyon bat	1
2009	July	LLVWM	Myostis Cal/Cil	1
2009	August	Pabco	Myotis yumanensis, Yuma myotis	2
2009	August	Pabco	Antrozous Pallidus, Pallid Bat	2
2009	August	Pabco	Parastrellus Hesperus, Canyon bat	1
2009	August	Pabco	Lasiurus Xanthinus, Wester Yellow Bat	1
2009	August	Cottonwood Cell	Tadarida brasiliensis, Mexica Free-tailed bat	1
2009	August	LLVWM	Myotis yumanensis, Yuma myotis	3
2009	August	LLVWM	Myostis Cal/Cil	1
2009	September	Nature Preserve	Myotis californicus, California myotis	1
2009	September	Pabco	Antrozous Pallidus, Pallid Bat	3
2009	September	Pabco	Tadarida brasiliensis, Mexica Free-tailed bat	1
2009	September	Pabco	Corynorhinus townsendii, townsend's Big-eared Bat	1
2009	September	LLVMW	Myotis yumanensis, Yuma myotis	13
2009	September	LLVMW	Tadarida brasiliensis, Mexica Free-tailed bat	1
2009	September	LLVMW	Myostis Cal/Cil	1
				195

Table 2 – Sex and Reproductive State Data

Date	Year	Date	Species Name	Reproductive Status	M	F	Unk
4/24/08	2008	4/24/08	ANPA	Non Reproductive	0	2	0
6/11/08	2008	6/11/08	ANPA	Lactating	0	11	0
6/11/08	2008	6/11/08	ANPA	Scrotal	1	0	0
6/11/08	2008	6/11/08	ANPA	Non Reproductive	1	0	0
6/11/08	2008	6/11/08	LAXA	Non Reproductive	1	0	0
6/12/08	2008	6/12/08	PAHE	Lactating	0	1	0
6/12/08	2008	6/12/08	PAHE	Post Lactating	0	1	0
6/12/08	2008	6/12/08	PAHE	Non Reproductive	1	0	0
6/12/08	2008	6/12/08	LAXA	Non Reproductive	1	0	0
7/28/08	2008	7/28/08	PAHE	Post Lactating	0	1	0
7/28/08	2008	7/28/08	TABR	Non Reproductive	1	0	0
7/28/08	2008	7/28/08	TABR	Non Reproductive	0	1	0
7/28/08	2008	7/28/08	MYCI	Non Reproductive	1	0	0
7/28/08	2008	7/28/08	Myotis sp	unknown	0	0	1
7/29/08	2008	7/29/08	ANPA	Non Reproductive	1	0	0
7/29/08	2008	7/29/08	ANPA	Non Reproductive	0	1	0
7/29/08	2008	7/29/08	LAXA	unknown	0	0	1
7/29/08	2008	7/29/08	MYCA	Scrotal	1	0	0
7/31/08	2008	7/31/08	PAHE	Non Reproductive	0	1	0
7/31/08	2008	7/31/08	ANPA	Non Reproductive	1	0	0
7/31/08	2008	7/31/08	MYYU	Non Reproductive	1	0	0
7/31/08	2008	7/31/08	MYCA	Non Reproductive	1	0	0
7/31/08	2008	7/31/08	MYCA	Non Reproductive	0	1	0
7/31/08	2008	7/31/08	Myotis sp	unknown	0	0	1
8/11/08	2008	8/11/08	MYYU	Non Reproductive	3	0	0
8/11/08	2008	8/11/08	MYYU	Post Lactating	0	1	0
8/11/08	2008	8/11/08	MYYU	Non Reproductive	0	4	0
8/11/08	2008	8/11/08	MYCA	Non Reproductive	1	0	0
9/29/08	2008	9/29/08	MYYU	Non Reproductive	1	0	0
9/29/08	2008	9/29/08	MYCA	Non Reproductive	0	1	0
9/30/08	2008	9/30/08	Myotis sp	Non Reproductive	0	1	0
9/30/08	2008	9/30/08	MYCA	Non Reproductive	0	2	0
9/30/08	2008	9/30/08	MYYU	Non Reproductive	0	1	0
9/30/08	2008	9/30/08	TABR	Non Reproductive	0	1	0
10/1/08	2008	10/1/08	ANPA	Non Reproductive	0	1	0
10/2/08	2008	10/2/08	MYYU	Non Reproductive	0	3	0
10/2/08	2008	10/2/08	MYYU	Scrotal	2	0	0
10/2/08	2008	10/2/08	MYYU	Non Reproductive	1	0	0
10/2/08	2008	10/2/08	MYCA	Non Reproductive	0	4	0
10/2/08	2008	10/2/08	MYCA	Non Reproductive	1	0	0
10/2/08	2008	10/2/08	MYCI	Non Reproductive	2	0	0
10/2/08	2008	10/2/08	MYCI	Non Reproductive	0	1	0
10/2/08	2008	10/2/08	Myotis sp	Non Reproductive	0	1	0
10/23/08	2008	10/23/08	MYYU	Scrotal	3	0	0
4/21/09	2009	4/21/09	ANPA	Non Reproductive	0	1	0
5/11/09	2009	5/11/09	MYYU	Lactating	0	1	0
5/12/09	2009	5/12/09	ANPA	Pregnant	0	3	0
5/12/09	2009	5/12/09	ANPA	Lactating	0	4	0
5/12/09	2009	5/12/09	ANPA	Scrotal	2	0	0
5/13/09	2009	5/13/09	ANPA	Lactating	0	1	0
5/14/09	2009	5/14/09	MYYU	Non Reproductive	0	3	0
5/14/09	2009	5/14/09	MYYU	Non Reproductive	0	1	0
5/14/09	2009	5/14/09	Myotis sp	unknown	0	0	1
6/15/09	2009	6/15/09	MYYU	Non Reproductive	1	0	0
6/15/09	2009	6/15/09	ANPA	Lactating	0	1	0
6/16/09	2009	6/16/09	ANPA	Post Lactating	0	1	0
6/16/09	2009	6/16/09	ANPA	Lactating	0	10	0
6/17/09	2009	6/17/09	ANPA	Non Reproductive	0	1	0
6/17/09	2009	6/17/09	ANPA	Lactating	0	1	0
6/17/09	2009	6/17/09	ANPA	unknown	0	0	1
7/27/09	2009	7/27/09	MYYU	Non Reproductive	3	0	0
7/27/09	2009	7/27/09	MYYU	Non Reproductive	0	3	0
7/27/09	2009	7/27/09	unknown	unknown	0	0	1
7/28/09	2009	7/28/09	ANPA	Scrotal	4	0	0
7/28/09	2009	7/28/09	ANPA	Lactating	0	4	0
7/28/09	2009	7/28/09	ANPA	Non Reproductive	0	4	0
7/29/09	2009	7/29/09	ANPA	Non Reproductive	0	1	0
7/29/09	2009	7/29/09	Myotis sp	Scrotal	1	0	0
7/30/09	2009	7/30/09	MYYU	Scrotal	8	0	0
7/30/09	2009	7/30/09	MYYU	Non Reproductive	9	0	0
7/30/09	2009	7/30/09	MYYU	Non Reproductive	0	10	0
7/30/09	2009	7/30/09	MYYU	Post Lactating	0	9	0
7/30/09	2009	7/30/09	MYYU	unknown	0	0	1
7/30/09	2009	7/30/09	Myotis sp	Scrotal	1	0	0
7/30/09	2009	7/30/09	PAHE	Scrotal	1	0	0
8/25/09	2009	8/25/09	PAHE	Non Reproductive	0	1	0
8/25/09	2009	8/25/09	MYYU	Pregnant	0	1	0
8/25/09	2009	8/25/09	MYYU	Post Lactating	0	1	0
8/25/09	2009	8/25/09	ANPA	Post Lactating	0	2	0
8/25/09	2009	8/25/09	LAXA	Pregnant	0	1	0
8/26/09	2009	8/26/09	TABR	Non Reproductive	1	0	0
8/27/09	2009	8/27/09	MYYU	Scrotal	2	0	0
8/27/09	2009	8/27/09	MYYU	Non Reproductive	0	1	0
8/27/09	2009	8/27/09	Myotis sp	Non Reproductive	1	0	0
9/21/09	2009	9/21/09	Myotis sp	Post Lactating	0	1	0
9/22/09	2009	9/22/09	ANPA	Post Lactating	0	2	0
9/22/09	2009	9/22/09	ANPA	Non Reproductive	0	1	0
9/22/09	2009	9/22/09	TABR	Non Reproductive	0	1	0
9/22/09	2009	9/22/09	COTO	Scrotal	1	0	0
9/24/09	2009	9/24/09	TABR	Non Reproductive	1	0	0
9/24/09	2009	9/24/09	MYYU	Non Reproductive	3	0	0
9/24/09	2009	9/24/09	MYYU	Scrotal	6	0	0
9/24/09	2009	9/24/09	MYYU	Post Lactating	0	3	0
9/24/09	2009	9/24/09	MYYU	Non Reproductive	0	1	0
9/24/09	2009	9/24/09	MYYU	unknown	0	0	1
					71	116	8