

**Survey of Threatened and Endangered Bat
Species On Left Fork of Big Creek**

Prepared for:

Buffalo River Watershed Alliance

Prepared by:

James W. Gore

Endangered Bat Species Presence/Absence Survey

At the request of the Buffalo River Watershed Alliance, a survey was performed in order to determine the possible presence of any endangered or threatened bat species along the Left Fork of Big Creek, in the Buffalo River watershed. Left Fork is located within the known ranges of three species of bat that are currently included on the U.S. Fish & Wildlife Service's List of Threatened and Endangered Species. These are the endangered Indiana bat (*Myotis sodalis*), the endangered gray bat (*M. grisescens*), and the threatened northern long-eared bat (*M. septentrionalis*). Acoustic monitoring was conducted within the project area in order to determine the presence or absence of these species. One Anabat II bat detector (Titley Scientific, Inc.) was placed at each of three locations along the banks of Left Fork in Newton County, near the community of Vendor, AR (Fig. 1, Photo Log) on the nights of September 12-13, 2015. Detectors were positioned to detect bats foraging over large pools within the creek, and programmed to record beginning 30 minutes before sunset until approximately 30 minutes after sunrise. Recorded bat calls were then identified to species using Bat Call Identification (BCID) auto-i.d. software. Calls identified as one of the listed species were then manually inspected for confirmation and/or correction. Of the 26 calls identified by BCID as Indiana bat calls, three were visually confirmed as Indiana bat calls. Of the four bat calls that BCID identified as northern long-eared bat calls, all four were confirmed as northern long-eared bat calls. BCID identified 879 calls as gray bat calls. A sample of 100 calls were vetted, and approximately 20 were confirmed as being gray bat calls.

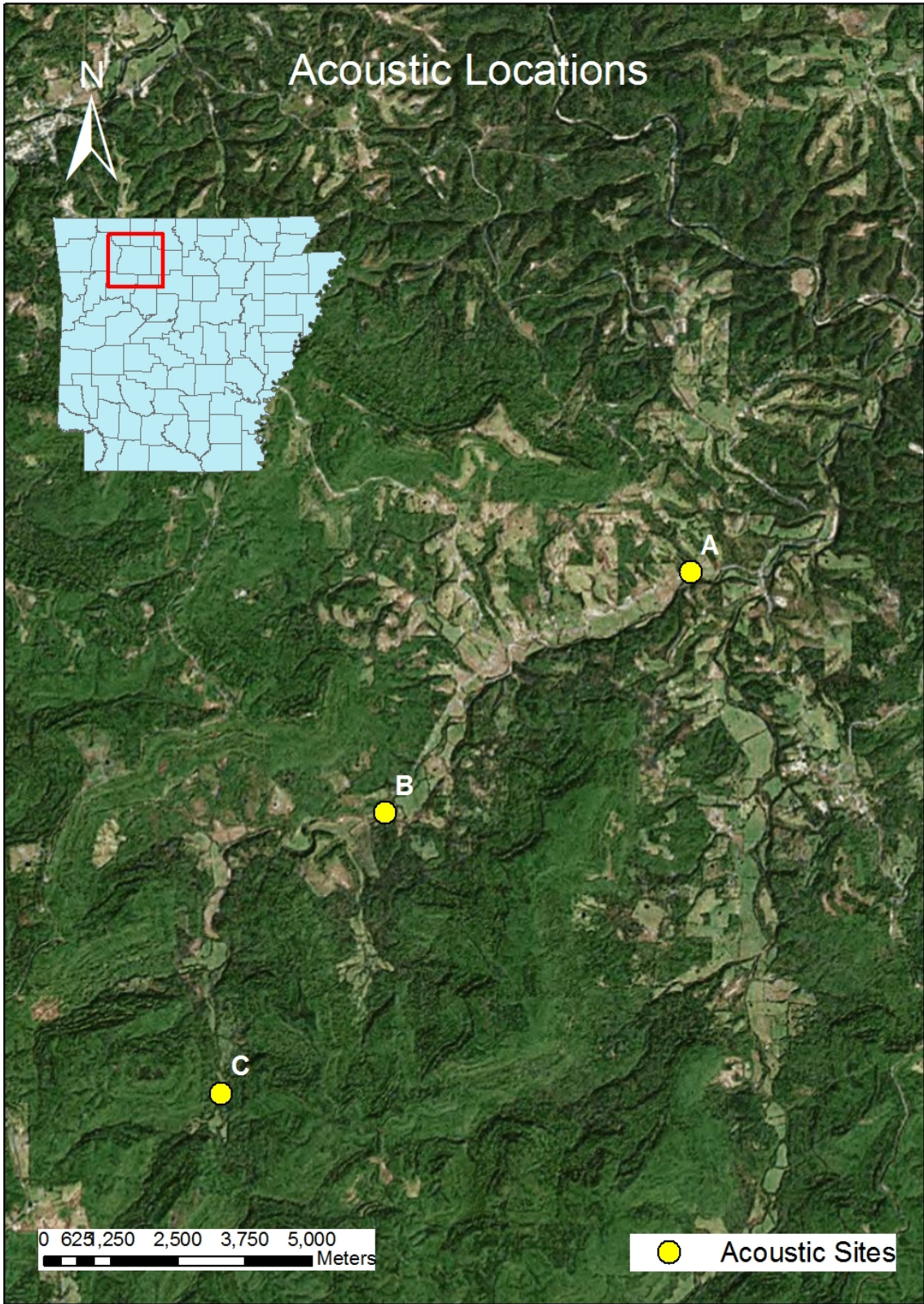


Figure 1. Locations of deployed acoustic devices along Left Fork in Newton Co. Arkansas.

The **Indiana Bat** (*Myotis sodalis*) is a medium-sized bat species with dull gray and chestnut colored fur. Indiana bats are migratory, mating in September and begin hibernation in October. Young are born in June and July. During the summer, Indiana bats roost under tree bark or in tree cavities along streams or in upland forests, with females and their young forming small colonies of 50 to 100 individuals. Limestone caves with stable temperatures of three to six degrees Celsius and 66 to 95 percent humidity are required for winter hibernation. In Arkansas, Indiana bats are known to occur in Benton, Clay, Independence, Izard, Johnson, Madison, Marion, Newton, Searcy, Stone, and Washington Counties. Pesticides, commercialization of roosting caves, and loss of foraging habitat all pose threats to the species. However, the most severe current threat to Indiana bat populations is the continued spread of white-nose syndrome which was first detected in Arkansas in January of 2014. The Study Area is located within the suitable limestone habitat that is required by Indiana bats for hibernation during the winter months. Additionally, Indiana bat presence was detected on Left Fork within the Study Area during the September survey.

The **Gray Bat** (*Myotis grisescens*) is a medium-sized bat species with dull gray or chestnut colored dorsal fur, and paler ventral fur. Gray bats are migratory, roosting almost exclusively in caves. In winter, deep vertical caves with temperatures between 5 and 11°C are preferred, while maternity colonies in the summer prefer domed caves between 14 and 24°C, with flowing water. Occasionally, gray bats will use alternative roost structures such as the storm drain located in Newark, AR which houses a maternity colony during the summer. Summer roosts are most often located within one kilometer of a stream or lake, over which the gray bats forage. Mating occurs in September and October, immediately before hibernation. Young are born in May or June, with larger colonies exhibiting higher rates of reproductive success. In Arkansas, Indiana bats are known to occur in Baxter, Benton, Boone, Carroll, Cleburne, Crawford, Franklin, Fulton, Independence, Izard, Jackson, Johnson, Lawrence, Madison, Marion, Newton, Pope, Searcy, Sebastian, Sharp, Stone, Van Buren, and Washington Counties.

Human disturbance of maternity roosts and hibernacula, pesticides, and loss of foraging habitat are the most critical threats to the species. The Study Area is located within the suitable habitat required by gray bat maternity and bachelor colonies. Additionally, gray bat presence was detected on Left Fork within the Study Area during the September survey.

The **Northern Long-Eared Bat** (*Myotis septentrionalis*) is a medium-sized bat species with olive or light brown fur above and light gray fur below and ears that extend well beyond the muzzle when folded forward. Northern long-eared bats mate in late summer or early fall and usually begin hibernation in October. Hibernation occurs in cool caves (6 - 9°C) with high humidity, and little or no air flow where the bats tuck themselves into small cracks and crevices in the cave wall. Young are born in May and June. During the summer, northern long-eared bat maternity colonies roost under tree bark or in tree cavities found in upland pine forests. The bats will also frequently roost in buildings, bat houses, or under bridges. Northern long-eared bats occur in virtually every county in Arkansas. Currently, the most severe threat to northern long-eared bat populations is the continued spread of white-nose syndrome which has caused 99% population reductions in the eastern United States, and has been detected in Arkansas since January of 2014. The Study Area is located within the suitable upland forest habitat that is required by northern long-eared bats. Additionally, northern long-eared bat presence was detected on Left Fork within the Study Area during the September survey.

References

Sealander, J.A, and G.A Heidt. 1990. *Arkansas Mammals*. The University of Fayetteville Press, Fayetteville, AR

U.S. Fish and Wildlife Services. "Listed species by county report."
http://ecos.fws.gov/tess_public/reports/species-by-current-range-county?fips=05101

U.S. Fish and Wildlife Services. "Species Profile: Gray Bat."
<http://ecos.fws.gov/speciesProfile/profile/speciesProfile?spcode=A04J>

U.S. Fish and Wildlife Services. "Species Profile: Indiana Bat."
<http://ecos.fws.gov/speciesProfile/profile/speciesProfile?spcode=A000>

U.S. Fish and Wildlife Services. "Species Profile: Northern Long-eared Bat."
<http://ecos.fws.gov/speciesProfile/profile/speciesProfile?spcode=A0JE>

James W. Gore

Wildlife Biologist / Environmental Technician

Summary of Qualifications

Education

- Bachelor of Science
Wildlife Ecology & Management
Arkansas State University
- Master of Science Candidate
Biology
Arkansas State University

Work Experience


- Six years surveying for Indiana bats throughout Ozark National Forest in Arkansas
- Captured and processed all Threatened & Endangered bat species native to Arkansas including:
 - Hundreds of threatened northern long-eared bats (*Myotis septentrionalis*)
 - Hundreds of endangered gray bats (*M. grisescens*)
 - Twenty-two endangered Ozark big-eared bats (*Corynorhinus townsendii ingens*)
 - Ten endangered Indiana bats (*M. sodalis*)
- Located Indiana bat and evening bat roosts throughout Ozark National Forest using radio telemetry
- Performed multiple threatened & endangered bat surveys for Arkansas Highway and Transportation Dept.
- Performed multiple threatened & endangered bat surveys for U.S. Department of Defense


Professional Credits and Affiliations

- Techniques and Identification Bat Acoustics Course
- Southeastern Bat Diversity Network Annual Meeting, 2015
- Bat Capture Technique Demonstrator for Devil's Den State Park
- Member of Southeastern Bat Diversity Network
- Member of Bat Conservation International


Photographic Log


PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	1		
Photo Description:			
Anabat and microphone setup at Site A			
	<small>Latitude: 35.94722 Longitude: -93.078302 Elevation: 206.7m Accuracy: 4.0m Azimuth: 178° (S) Pitch: 1.4° (0.7°) Time: 09-13-2015 12:13</small>		


Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	2		
Photo Description:			
Facing north from Site A			
	<small>Latitude: 35.94722 Longitude: -93.078302 Elevation: 206.7m Accuracy: 17.0m Azimuth: 2° (N) Pitch: 1.5° Time: 09-13-2015 12:14</small>		


PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	3		
Photo Description:			
Facing east from Site A			
	<small>Latitude: 35.94722 Longitude: -93.078302 Elevation: 206.7m Accuracy: 66.0m Azimuth: 88° (E) Pitch: 1.6° (2.3°) Time: 09-13-2015 12:14</small>		


Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	4		
Photo Description:			
Facing south from Site A			
	<small>Latitude: 35.94722 Longitude: -93.078302 Elevation: 206.7m Accuracy: 20.0m Azimuth: 189° (S) Pitch: 9.4° (3.0°) Time: 09-13-2015 12:15</small>		


PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	5		
Photo Description:			
Facing west from Site A			
	Latitude: 35.94722 Longitude: -93.078302 Elevation: 206.7m Accuracy: 7.0m Azimuth: 287° (W) Pitch: 0.5° (-5.2°) Time: 09-13-2015 12:16		


Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	6		
Photo Description:			
Anabat and microphone setup at Site B			
	Latitude: 35.914485 Longitude: -93.129672 Elevation: 249.7m Accuracy: 58.0m Azimuth: 74° (E) Pitch: -20.0° (2.4°) Time: 09-13-2015 11:39		


PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	7		
Photo Description:			
Facing north from Site B			
	<small>Latitude: 35.914485 Longitude: -93.129672 Elevation: 249.7m Accuracy: 28.0m Azimuth: 1° (N) Pitch: -3.0° (0.7°) Time: 09-13-2015 11:39</small>		


Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	8		
Photo Description:			
Facing east from Site B			
	<small>Latitude: 35.914485 Longitude: -93.129672 Elevation: 249.7m Accuracy: 99.0m Azimuth: 97° (E) Pitch: 1.0° Time: 09-13-2015 11:40</small>		


PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	9		
Photo Description:			
Facing south from Site B			
Latitude: 35.914485 Longitude: -93.129672 Elevation: 249.7m Accuracy: 118.0m Azimuth: 185° (S) Pitch: 1.4° Time: 09-13-2015 11:40			


Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	10		
Photo Description:			
Facing west from Site B			
Latitude: 35.914485 Longitude: -93.129672 Elevation: 249.7m Accuracy: 18.0m Azimuth: 274° (W) Pitch: -1.5° (-0.8°) Time: 09-13-2015 11:40			


PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	11		
Photo Description:			
Anabat and microphone setup at Site C			
	<small>Latitude: 35.876336 Longitude: -93.157297 Elevation: 322.2m Accuracy: 8.0m Azimuth: 292° (W) Pitch: -9.0° (-0.5°) Time: 09-13-2015 10:58</small>		


Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	12		
Photo Description:			
Facing north from Site C			
	<small>Latitude: 35.876337 Longitude: -93.157305 Elevation: 321.0m Accuracy: 6.0m Azimuth: 5° (N) Pitch: -4.1° Time: 09-13-2015 10:59</small>		

PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	13		
Photo Description:			
Facing east from Site C			
<small>Latitude: 35.876337 Longitude: -93.157307 Elevation: 320.9m Accuracy: 6.0m Azimuth: 90° (E) Pitch: 0.8° (1.3°) Time: 09-13-2015 10:59</small>			

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	14		
Photo Description:			
Facing south from Site C			
<small>Latitude: 35.876337 Longitude: -93.157309 Elevation: 320.7m Accuracy: 5.0m Azimuth: 179° (S) Pitch: 2.5° Time: 09-13-2015 10:59</small>			

PHOTOGRAPHIC LOG

Project Name:	Buffalo River Watershed Alliance		
Location:	Newton	AR	13 Sept. 2015
	County	State	Date
Photo Number:	15		
Photo Description:			
Facing west from Site C			
	<p>Latitude: 35.876325 Longitude: -93.1573 Elevation: 321.5m Accuracy: 51.0m Azimuth: 274° (W) Pitch: -2.7° Time: 09-13-2015 11:02</p>		

Bat Call Identification Summaries

FILENAME	SPECIES	SP PERCENT	GROUP	GR PERCENT	TOTAL PULSES	DISC PROB	FOLDER
P9121926.26#	LABO	40	MID	40	5	0.136294	sitea
P9121931.48#	LABO	42.8571	MID	71.4286	7	0.132801	sitea
P9121933.59#	PESU	100	MID	100	17	0.985458	sitea
P9121934.46#	LABO	40	MID	60	5	0.109456	sitea
P9121935.37#	LABO	50	MID	66.6667	6	0.204223	sitea
P9121937.02#	PESU	85.7143	MID	85.7143	14	0.719945	sitea
P9121939.26#	LABO	53.3333	MID	80	15	0.0344364	sitea
P9121940.20#	PESU	60	MID	60	5	0.342289	sitea
P9121940.55#	PESU	91.6667	MID	91.6667	12	0.820864	sitea
P9121943.35#	PESU	100	MID	100	24	0.990238	sitea
P9121949.48#	MYGR	83.3333	MYOTIS	83.3333	6	0.580808	sitea
P9121957.38#	PESU	40	MID	40	5	0.13817	sitea
P9121958.09#	PESU	87.5	MID	87.5	24	0.756518	sitea
P9122003.56#	PESU	83.3333	MID	83.3333	6	0.662606	sitea
P9122005.11#	PESU	100	MID	100	6	0.930809	sitea
P9122005.25#	PESU	71.4286	MID	71.4286	14	0.467162	sitea
P9122006.43#	PESU	58.6207	MID	96.5517	29	0.561388	sitea
P9122007.22#	PESU	100	MID	100	11	0.971421	sitea
P9122009.49#	PESU	94.4444	MID	94.4444	18	0.878521	sitea
P9122014.28#	PESU	67.8571	MID	89.2857	28	0.577646	sitea
P9122016.34#	PESU	95	MID	100	20	0.939212	sitea
P9122017.27#	PESU	93.3333	MID	100	15	0.918433	sitea
P9122023.46#	PESU	84.8485	MID	90.9091	33	0.761848	sitea
P9122027.39#	PESU	79.1667	MID	79.1667	24	0.593146	sitea
P9122040.24#	PESU	70	MID	80	10	0.545786	sitea
P9122047.28#	PESU	100	MID	100	9	0.974668	sitea
P9122051.37#	PESU	81.8182	MID	90.9091	22	0.735148	sitea
P9122053.44#	MYGR	50	MYOTIS	50	12	0.231714	sitea
P9122058.44#	PESU	87.5	MID	93.75	16	0.807577	sitea
P9122104.59#	PESU	83.3333	MID	83.3333	6	0.302011	sitea
P9122105.49#	PESU	100	MID	100	6	0.955504	sitea
P9122110.28#	PESU	75	MID	80.5556	36	0.573988	sitea
P9122114.12#	PESU	80	MID	80	5	0.612027	sitea
P9122118.41#	LABO	50	MID	90	10	0.241355	sitea
P9122122.15#	UNKN		MID	66.6667	6		sitea
P9122125.18#	MYGR	57.1429	MYOTIS	71.4286	7	0.0269674	sitea
P9122125.27#	PESU	100	MID	100	22	0.891559	sitea
P9122142.23#	PESU	90.9091	MID	90.9091	11	0.803565	sitea
P9122144.52#	LABO	37.5	MID	62.5	8	0.137367	sitea
P9122155.05#	MYGR	66.6667	MYOTIS	66.6667	6	0.131896	sitea
P9122205.59#	MYGR	64.7059	MYOTIS	76.4706	17	0.485379	sitea
P9122206.25#	PESU	76.9231	MID	100	13	0.755676	sitea
P9122207.30#	PESU	73.3333	MID	86.6667	15	0.621196	sitea
P9122207.48#	MYGR	100	MYOTIS	100	5	0.738815	sitea
P9122208.15#	UNKN		MID	50	16		sitea
P9122213.23#	MYLU	52.1739	MYOTIS	52.1739	23	0.206831	sitea
P9122213.54#	MYGR	76.9231	MYOTIS	76.9231	13	0.36889	sitea
P9122224.55#	PESU	56	MID	84	25	0.363573	sitea

P9122236.39#	PESU	60	MID	60	5	0.342394	sitea
P9122237.52#	PESU	94.7368	MID	94.7368	19	0.886691	sitea
P9122241.17#	PESU	60	MID	100	5	0.0413934	sitea
P9122247.31#	PESU	57.1429	MID	71.4286	7	0.394999	sitea
P9122300.24#	LABO	40	MID	80	5	0.0861983	sitea
P9122342.52#	PESU	60	MID	80	5	0.45892	sitea
P9122344.27#	PESU	80	MID	100	5	0.765074	sitea
P9122346.30#	PESU	100	MID	100	9	0.926984	sitea
P9122354.47#	PESU	100	MID	100	7	0.965312	sitea
P9122358.00#	LABO	50	MID	87.5	8	0.180232	sitea
P9130019.05#	PESU	60	MID	60	5	0.344383	sitea
P9130019.35#	PESU	80	MID	100	10	0.782101	sitea
P9130025.27#	NYHU	50	MID	83.3333	6	0.075472	sitea
P9130026.19#	MYGR	66.6667	MYOTIS	83.3333	6	0.0540103	sitea
P9130044.03#	PESU	100	MID	100	11	0.97964	sitea
P9130044.22#	PESU	100	MID	100	16	0.9858	sitea
P9130054.01#	PESU	87.5	MID	87.5	8	0.717179	sitea
P9130056.01#	NYHU	57.1429	MID	85.7143	7	0.44481	sitea
P9130057.38#	PESU	61.5385	MID	69.2308	13	0.413965	sitea
P9130139.35#	UNKN		MID	66.6667	9		sitea
P9130153.08#	PESU	71.4286	MID	71.4286	7	0.481536	sitea
P9130210.47#	PESU	50	MID	80	20	0.0694518	sitea
P9130218.46#	PESU	57.1429	MID	71.4286	7	0.305173	sitea
P9130225.05#	PESU	60	MID	93.3333	15	0.550741	sitea
P9130239.08#	PESU	57.1429	MID	57.1429	7	0.101815	sitea
P9130246.30#	MYGR	60	MYOTIS	80	5	0.412998	sitea
P9130248.30#	MYGR	66.6667	MYOTIS	66.6667	9	0.156622	sitea
P9130251.51#	MYGR	85.7143	MYOTIS	85.7143	7	0.549962	sitea
P9130256.30#	NYHU	66.6667	MID	83.3333	6	0.0383984	sitea
P9130302.52#	MYGR	33.3333	MYOTIS	83.3333	6	0.265566	sitea
P9130312.17#	MYGR	90.9091	MYOTIS	90.9091	11	0.754753	sitea
P9130317.02#	MYGR	83.3333	MYOTIS	83.3333	6	0.52643	sitea
P9130318.27#	PESU	60	MID	60	5	0.0609737	sitea
P9130342.56#	PESU	80	MID	80	5	0.253695	sitea
P9130353.04#	PESU	83.3333	MID	83.3333	6	0.668212	sitea
P9130401.36#	MYGR	57.1429	MYOTIS	71.4286	7	0.162816	sitea
P9130405.35#	MYGR	80	MYOTIS	80	5	0.331555	sitea
P9130407.06#	PESU	80	MID	80	5	0.243087	sitea
P9130438.12#	MYGR	60	MYOTIS	80	5	0.166011	sitea
P9131929.06#	NYHU	85.7143	MID	100	7	0.702413	sitea
P9131931.49#	PESU	85.7143	MID	90.4762	21	0.763671	sitea
P9131932.25#	PESU	50	MID	66.6667	12	0.304604	sitea
P9131934.18#	UNKN		MID	100	8		sitea
P9131934.52#	PESU	57.1429	MID	57.1429	14	0.205183	sitea
P9131936.57#	PESU	66.6667	MID	70.8333	24	0.454261	sitea
P9131939.38#	PESU	83.3333	MID	83.3333	6	0.631105	sitea
P9131941.44#	PESU	85.7143	MID	85.7143	7	0.474534	sitea
P9131942.00#	PESU	54.5455	MID	81.8182	11	0.430357	sitea
P9131946.04#	PESU	100	MID	100	8	0.944801	sitea
P9131950.39#	PESU	83.3333	MID	83.3333	6	0.165969	sitea
P9131951.04#	PESU	33.3333	MID	41.6667	12	0.11521	sitea
P9131951.16#	PESU	100	MID	100	5	0.680424	sitea

P9131951.33#	PESU	36.3636	MID	36.3636	11	0.0839463	sitea
P9131952.06#	PESU	72.2222	MID	72.2222	18	0.256243	sitea
P9131952.16#	PESU	34.7826	MID	39.1304	23	0.120797	sitea
P9131956.15#	PESU	54	MID	54	50	0.105941	sitea
P9131956.51#	PESU	29.4118	MID	29.4118	17	0.00809109	sitea
P9131957.10#	PESU	52.1739	MID	52.1739	23	0.00578814	sitea
P9131957.28#	PESU	86.2069	MID	93.1034	29	0.769473	sitea
P9131957.59#	PESU	64.7059	MID	64.7059	17	0.364272	sitea
P9131959.10#	MYGR	52.9412	MYOTIS	52.9412	34	0.0634838	sitea
P9131959.34#	PESU	66.6667	MID	66.6667	9	0.0283343	sitea
P9131959.49#	PESU	50	MID	50	6	0.104367	sitea
P9132000.00#	MYGR	61.5385	MYOTIS	61.5385	13	0.139204	sitea
P9132000.30#	MYGR	60	MYOTIS	60	20	0.10793	sitea
P9132000.46#	PESU	75	MID	75	8	0.105892	sitea
P9132001.31#	MYGR	66.6667	MYOTIS	78.3333	60	0.356184	sitea
P9132002.15#	PESU	36.8421	MID	36.8421	19	0.0103968	sitea
P9132002.31#	PESU	28.5714	MID	28.5714	14	0.0453839	sitea
P9132002.43#	PESU	80	MID	80	15	0.00836176	sitea
P9132002.59#	PESU	45.8333	MID	45.8333	24	0.0159705	sitea
P9132005.34#	PESU	50	MID	50	26	0.128762	sitea
P9132006.48#	PESU	65.2174	MID	73.913	23	0.368126	sitea
P9132007.06#	PESU	80	MID	80	5	0.235013	sitea
P9132009.24#	PESU	87.5	MID	87.5	8	0.46726	sitea
P9132010.24#	PESU	34.7826	MID	43.4783	23	0.123806	sitea
P9132010.41#	MYGR	76.9231	MYOTIS	84.6154	13	0.0353416	sitea
P9132011.27#	PESU	75	MID	75	16	0.497115	sitea
P9132012.17#	PESU	100	MID	100	8	0.969352	sitea
P9132012.32#	MYGR	88.8889	MYOTIS	88.8889	9	0.337326	sitea
P9132013.26#	PESU	87.5	MID	87.5	24	0.576637	sitea
P9132013.48#	PESU	68	MID	68	25	0.379263	sitea
P9132014.12#	PESU	83.3333	MID	83.3333	18	0.566475	sitea
P9132014.51#	PESU	62.5	MID	62.5	8	0.354843	sitea
P9132016.08#	PESU	100	MID	100	6	0.962296	sitea
P9132018.24#	PESU	87.5	MID	87.5	24	0.753371	sitea
P9132026.49#	PESU	83.3333	MID	83.3333	6	0.653577	sitea
P9132027.39#	MYGR	61.5385	MYOTIS	61.5385	13	0.230337	sitea
P9132038.03#	PESU	93.75	MID	93.75	16	0.839467	sitea
P9132045.39#	PESU	78.9474	MID	78.9474	19	0.607538	sitea
P9132047.19#	PESU	100	MID	100	9	0.975159	sitea
P9132050.21#	PESU	83.3333	MID	83.3333	12	0.675758	sitea
P9132053.50#	MYGR	71.4286	MYOTIS	71.4286	14	0.18284	sitea
P9132059.40#	PESU	66.6667	MID	66.6667	6	0.237296	sitea
P9132106.44#	PESU	42.8571	MID	42.8571	7	0.0870654	sitea
P9132107.39#	PESU	96.1538	MID	96.1538	26	0.893005	sitea
P9132108.27#	PESU	60	MID	60	5	0.12928	sitea
P9132111.09#	PESU	57.1429	MID	57.1429	7	0.0151277	sitea
P9132111.58#	PESU	66.6667	MID	66.6667	6	0.04142	sitea
P9132112.08#	PESU	57.1429	MID	57.1429	7	0.121477	sitea
P9132114.00#	PESU	42.8571	MID	42.8571	7	0.152667	sitea
P9132116.44#	MYGR	100	MYOTIS	100	5	0.334231	sitea
P9132120.11#	PESU	100	MID	100	17	0.982952	sitea
P9132120.45#	PESU	33.3333	MID	33.3333	6	0.0891777	sitea

P9132123.29#	MYGR	100	MYOTIS	100	6	0.05854	sitea
P9132123.42#	PESU	37.5	MID	50	8	0.103626	sitea
P9132124.40#	MYGR	40	MYOTIS	60	5	0.108267	sitea
P9132126.01#	MYGR	80	MYOTIS	80	5	0.390727	sitea
P9132129.38#	PESU	80	MID	80	5	0.222933	sitea
P9132130.03#	PESU	33.3333	MID	33.3333	6	0.0679647	sitea
P9132133.01#	MYGR	85.7143	MYOTIS	85.7143	7	0.0736066	sitea
P9132134.39#	PESU	76.4706	MID	76.4706	17	0.572136	sitea
P9132137.19#	PESU	66.6667	MID	66.6667	6	0.157362	sitea
P9132137.53#	MYGR	57.1429	MYOTIS	57.1429	7	0.153258	sitea
P9132139.25#	PESU	40	MID	40	5	0.127766	sitea
P9132143.10#	PESU	71.4286	MID	71.4286	7	0.453598	sitea
P9132156.41#	MYGR	66.6667	MYOTIS	66.6667	6	0.286499	sitea
P9132158.49#	MYGR	100	MYOTIS	100	5	0.493802	sitea
P9132159.06#	MYGR	100	MYOTIS	100	7	0.649432	sitea
P9132159.33#	LABO	50	MID	83.3333	6	0.207919	sitea
P9132200.22#	PESU	83.3333	MID	83.3333	6	0.458024	sitea
P9132201.02#	PESU	68.1818	MID	68.1818	22	0.134937	sitea
P9132205.18#	PESU	80	MID	80	5	0.579898	sitea
P9132206.43#	PESU	64.2857	MID	64.2857	14	0.367543	sitea
P9132207.05#	PESU	90	MID	90	10	0.785188	sitea
P9132208.05#	PESU	40	MID	40	5	0.107573	sitea
P9132209.56#	PESU	85.7143	MID	92.8571	14	0.755098	sitea
P9132243.21#	PESU	80	MID	80	5	0.159349	sitea
P9132247.16#	PESU	27.7778	MID	50	18	0.120027	sitea
P9132255.36#	PESU	60	MID	60	10	0.00411851	sitea
P9132259.04#	PESU	93.3333	MID	93.3333	15	0.857439	sitea
P9132305.14#	PESU	100	MID	100	13	0.982002	sitea
P9132323.08#	MYGR	100	MYOTIS	100	5	0.316934	sitea
P9132323.25#	PESU	80	MID	80	5	0.33659	sitea
P9132328.41#	UNKN		MID	66.6667	6		sitea
P9132332.06#	PESU	60	MID	60	5	0.0651642	sitea
P9132338.43#	PESU	58.3333	MID	58.3333	12	0.0146242	sitea
P9132339.57#	UNKN		MID	60	10		sitea
P9132340.36#	MYGR	100	MYOTIS	100	6	0.164595	sitea
P9132344.10#	PESU	66.6667	MID	66.6667	6	0.0957892	sitea
P9132346.57#	PESU	100	MID	100	5	0.757761	sitea
P9132348.24#	PESU	28.5714	MID	42.8571	7	0.0902077	sitea
P9132352.45#	PESU	50	MID	66.6667	6	0.26502	sitea
P9140024.39#	UNKN		MID	57.1429	7		sitea
P9140054.33#	PESU	100	MID	100	17	0.973257	sitea
P9140059.13#	MYGR	100	MYOTIS	100	5	0.646587	sitea
P9140104.32#	MYLU	50	MYOTIS	87.5	8	0.0729919	sitea
P9140141.16#	LABO	66.6667	MID	83.3333	6	0.438706	sitea
P9140224.43#	PESU	90.9091	MID	100	11	0.890124	sitea
P9140243.58#	LABO	45.4545	MID	81.8182	11	0.100587	sitea
P9140252.26#	UNKN		MID	44.4444	9		sitea
P9140303.22#	PESU	50	MID	100	6	0.126625	sitea
P9140424.45#	MYGR	100	MYOTIS	100	5	0.721353	sitea