Protocol-level Blunt-nosed Leopard Lizard Survey Results Report

Assessor's Parcel Map Number
531-011-02
County of Kern
Bakersfield, California

Prepared for:

Mr. Adam Stubbs
DeWalt Corporation
1930 22nd Street
Bakersfield, California 93301

Prepared by:

Pruett Biological Resource Consulting
8819 Latera Court
Bakersfield, California 93314
661.421.0006

EXECUTIVE SUMMARY

Pruett Biological Resource Consulting, Inc. (PruettBio) conducted protocol-level blunt-nosed leopard lizard (*Gambelia sila*; BNLL) surveys in accordance with the *Approved Survey Methodology for the Blunt-nosed Leopard Lizard* (California Department of Fish and Wildlife [CDFW] 2019) for DeWalt Corporation on approximately 77.45 acres in Section 18, Township 29 South, Range 29 East in Bakersfield, Kern County, California.

The project is located within the geographic range of several federal-, and state-listed, threatened and/or endangered plant and animal taxa. Several non-listed, special-status species also have the potential to occur in the vicinity of the project. In addition to being a federally endangered species, BNLL is also a CDFW fully-protected species.

The purpose of this report is to document biological resources identified during twelve adult surveys and five hatchling surveys protocol-level BNLL surveys conducted in 2025. While BNLL was the target species for detection, other special-status species occurrences are documented herein, if observed. No BNLL individuals were observed as a result of field work conducted for this project.

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INTRODUCTION

Pruett Biological Resource Consulting, Inc. (PruettBio) conducted protocol- level surveys for blunt-nosed leopard lizards (*Gambelia sila*; BNLL) in accordance with the *Approved Survey Methodology for the Blunt-nosed Leopard Lizard* (California Department of Fish and Wildlife [CDFW] 2019 [Methodology]) on behalf of DeWalt Corporation on approximately 77.45 acres in Section 18, Township 29 South, Range 29 East in Kern County, California. These surveys were requested by DeWalt Corporation to support permitting for anticipated land development. This report documents the results of reports conducted from May 15 to June 27, 2025, for adult surveys and August 16 to September 19, 2025, for hatchling surveys.

The Methodology requires for projects requiring habitat removal that 12 adult survey days be conducted between April 15 and July 15, and five surveys conducted between August 15 and September 30, with 2 surveys conducted between August 15 and 31, and 2 surveys conducted between September 15 and 30, with the remaining survey taking place at any point in the August 15 to September 30 survey window.

A total of 17 surveys were conducted during the optimal survey period with no BNLL detections. The results of survey efforts by PruettBio are further detailed in this report.

PROJECT LEGAL DESCRIPTION

The project consists of 77.45 gross acres (31.34 hectares) of APN 531-011-02. The project site is located approximately 0.25 miles southeast of the intersection of Morning Drive and Paladino Drive, Section 18, Township 29 South, Range 29 East, Mount Diablo Base and Meridian.

PROJECT SETTING AND PHYSICAL DESCRIPTION

The project site is in the southern San Joaquin Valley; a broad, treeless plain in the rain shadow of the Inner Coast Ranges. The region's climate can be characterized as Mediterranean; with hot, dry summers and cool, moist winters. Summer high temperatures typically exceed 100 °Fahrenheit (°F); with an average of 110 days per year over 90 °F. Winter temperatures in the San Joaquin Valley are mild, with an average of only 16 days per year with frost (Twisselmann 1967).

Rainfall varies, increasing from west to east, with the west side of the valley receiving an average of around 4 inches (10 centimeters) per year and the east side averaging about 6 inches (15 centimeters) per year. Winter fog, called Tule fog, sometimes forms during the months of November, December, and January, supplementing the annual precipitation. Approximately 90% of the rainfall in the region occurs between November 1 and April 1. Drought cycles occur periodically, becoming severe enough that plant and animal populations can experience large fluctuations. The vegetation communities in the San Joaquin Valley are distinguishable from the Mojave Desert to the east due to Tule fog, higher humidity, and isolation from continental climatic influences by mountain ranges (Twisselmann 1967).

The project site is located at the west edge of urban development of Metropolitan Bakersfield. Before conversion to farmland, the original vegetive communities of the project site were Non-native Grassland (Holland 42200) and Valley Saltbush Scrub (Holland 36220). The project site is still predominately Non-native Grassland habitat that had not been previously disturbed or has since recovered. The project includes vacant land with scattered abandoned oil wells. The project is surrounded by vacant land and residential development. Vacant land around the project is similarly Non-native Grassland habitat with scattered oil development. Since 2008, the vicinity has undergone increasing conversion from native habitat to residential properties.

The general topography of the area slopes very subtly south with the project generally flat at about 755 feet (230 meters) above mean sea level. The project was historically used for oil production and livestock grazing. The project includes vacant land with abandoned oil wells. The project is surrounded by vacant land and residential development with scattered oil production. Historical aerial imagery going back to 1985 shows similar conditions with additional oil development in the vicinity. In 2006, a pad had been

graded that covered most of the project and spoils piles were unloaded there, and the vegetation has since recovered. During that same year, residential development increased along Morning Dr and Paladino Dr. By 2008, single family residence lots immediately northeast of the project along Rivani Dr had been graded and homes were started being built in 2020.

METHODS

SURVEY PROCEDURES

PruettBio conducted surveys in accordance with the Methodology. As such each survey crew consisted of no more than 3 level I surveys for every level II surveyors. A level I surveyor is defined in the Methodology as someone who has demonstrated the ability to distinguish BNLL from other common lizards likely to occur on site. A level II surveyor is one who meets the criteria of a level I with the additional requirements of having participated in 50 survey days, or 25 survey days and attended a BNLL identification workshop approved by CDFW), and has made at least one confirmed BNLL field observation. Level I surveyors for this project included Rebecca Gomez, with level II surveyors included Jared Pratt, Steve Pruett, Megan Pruett, and Jacob Spriester.

Prior to and immediately following each survey day the ambient air temperature was recorded approximately two centimeters about the ground and two centimeters below ground. Additional site conditions recorded were cloud cover and wind speed. All surveys were started after 0800 and concluded prior to 1400.

A total of 12 adult surveys were conducted between May 15 to June 27, 2025, for adult surveys and five hatchling surveys were conducted between August 16 to September 19, 2025. Based on topography and vegetation cover, surveyors conducted pedestrian parallel transects spaced no more than 65 feet (20 meters) apart, and during each survey day the entirety of the project was surveyed.

RESULTS

This section summarizes the results of the protocol-level BNLL surveys conducted on the project site and includes a discussion of existing site conditions as relevant to suitable BNLL habitat. No BNLL were observed within the project area. Reptile species observed included side-blotched lizard (*Uta stansburiana*), western whiptail (*Aspidoscelis tigris*), and San Joaquin coachwhip (*Masticophis flagellum ruddocki*).

VEGETATION COMMUNITIES AND LAND COVER

Annual (non-native) Grassland – Approximately 85% cover

Non-native annual grassland is typically comprised of introduced species of European origin. Annual grassland is characterized by a sparse to dense cover of low (< 3 feet) annual grasses and native and non-native herbaceous species. Shrubs and sub-shrubs are sometimes scattered in grasslands but do not dominate the vegetation. Annual grassland is often associated with numerous species of showy-flowered, native annual forbs (“wildflowers”), especially in years of favorable rainfall. Species composition is variable depending on microhabitat conditions. Common, dominant, annual (non-native) grassland species observed within the project include both native and non-native grasses and forbs including: red brome (*Bromus madritensis* ssp. *rubens*), common Mediterranean grass (*Schismus spp.*), red-stem filaree (*Erodium cicutarium*), rip-gut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum* ssp. *glaucum*), California goldfields (Lasthenia californica), Russian thistle (*Salsola tragus*), doveweed (*Croton setiger*), and fiddleneck (*Amsinckia spp.*).

Bare Ground – Approximately 15% cover

Bare ground are areas that were previously disturbed and have little to no vegetation. Within the project, bare ground is limited to roads that were previously rough graded and continue to be disturbed by vehicle use.

BIOLOGICAL RESOURCES

No BNLL were observed during protocol-level surveys focused, protocol-level surveys were conducted for the preparation of this report. A San Joaquin coachwhip, a California Species of Special Concern, was observed incidentally (coordinates 118.90572°W, 35.40793°N). Daily survey details and incidental species observations are shown in Tables 1-1 and 1-2.

Table 1-1: Daily survey conditions and lizard observations.

Survey Date	Surveyors	Cloud Cover	Time		Air Temp (°F)		Soil Temp (°F)		Wind Speed (MPH)		BNLL			Side blotch lizard	Western whiptail
			Start	End	Start	End	Start	End	Start	End	Male	Female	Juvenile	(*Uta stansburiana*)	(*Aspidoscelis tigris munda*)
05/15/25	**Jared Pratt, Jacob Spriester,** Rebecca Gomez	0%	10:31 AM	12:18 PM	78.0	85.0	96.8	84.1	3.7	2.3	0	0	0	24	0
05/16/25	**Jared Pratt, Jacob Spriester,** Rebecca Gomez	0%	9:43 AM	11:20 AM	77.0	89.8	89.0	105.7	4.2	6.2	0	0	0	21	0
05/26/25	**Jared Pratt, Jacob Spriester, Steve Pruett,** Rebecca Gomez	0%	11:08 AM	12:26 PM	78.0	91.0	80.0	113.0	1.7	6.5	0	0	0	17	0
05/27/25	**Jared Pratt, Steve Pruett,** Rebecca Gomez	0%	9:36 AM	11:14 AM	77.0	79.6	90.1	111.5	3.5	3.6	0	0	0	20	0
05/28/29	**Jared Pratt, Steve Pruett,** Rebecca Gomez	10%	8:45 AM	10:18 AM	77.2	88.2	86.4	107.4	4.3	1.8	0	0	0	14	0

05/29/25	**Jared Pratt, Jacob Spriester,** Rebecca Gomez	0%	8:54 AM	10:28 AM	77.0	84.0	84.1	106.3	3.1	2.2	0	0	0	17	0
06/09/25	**Jacob Spriester, Steve Pruett,** Rebecca Gomez	0%	8:10 AM	9:49 AM	82.7	86.7	86.8	113.7	4.4	4.3	0	0	0	27	0
06/10/25	**Jared Pratt, Steve Pruett,** Rebecca Gomez	0%	8:09 AM	9:41 AM	85.8	91.6	91.3	93.7	4.6	5.2	0	0	0	41	0
06/17/25	**Jacob Spriester, Steve Pruett,** Rebecca Gomez	0%	8:21 AM	9:51 AM	77.7	89.1	85.3	103.4	5.1	3.1	0	0	0	27	0
06/25/25	**Jared Pratt, Jacob Spriester,** Rebecca Gomez	0%	8:05 AM	9:38 AM	78.0	89.0	80.0	104.0	3.0	4.8	0	0	0	25	0
06/26/25	**Jared Pratt, Jacob Spriester,** Rebecca Gomez	0%	8:05 AM	9:35 AM	80.0	85.0	80.0	90.0	2.9	1.2	0	0	0	24	0
06/27/25	**Jared Pratt, Jacob Spriester,** Rebecca Gomez	0%	8:07 AM	9:35 AM	81.0	86.0	86.6	100.0	3.2	4.5	0	0	0	30	0

08/16/25	**Steve Pruett, Jared Pratt, Megan Pruett, Jacob Spriester**	0%	8:00 AM	9:17 AM	78.0	85.0	79.0	90.0	<2	1.0	0	0	0	33	0
08/18/25	**Steve Pruett, Jared Pratt, Megan Pruett, Jacob Spriester**	0%	8:00 AM	9:00 AM	77.0	85.0	79.0	90.0	<2	<2	0	0	0	23	0
08/19/25	**Steve Pruett, Megan Pruett, Jacob Spriester**	0%	8:00 AM	9:00 AM	78.0	88.0	82.0	90.0	<2	<2	0	0	0	21	0
09/17/25	**Jared Pratt, Megan Pruett, Jacob Spriester**	5%	8:24 AM	10:05 AM	84.0	88.0	82.0	85.0	5.2	7.3	0	0	0	20	2
9/19/25	**Jared Pratt, Jacob Spriester**	75%	11:14 AM	1:30 PM	82.0	87.0	88.4	82.0	5.4	2.2	0	0	0	21	0

Table 1-2: Species observed during survey efforts.

Scientific Name	Common Name
Birds	
Buteo jamaicensis	Red-tailed hawk
Cathartes aura	Turkey vulture
Charadrius vociferus	Killdeer
Columba livia	Rock dove
Corvus corax	Common raven
Haemorhous mexicanus	House finch
Petrochelidon pyrrhonota	Cliff swallow
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Zenaida macroura	Mourning dove
Mammals	
Canis familiaris	Domestic dog
Lepus californicus	Black-tailed jackrabbit
Spermophilus beecheyi	California ground squirrel
Sylvilagus audubonii	Desert cottontail
Reptiles	
Aspidoscelis tigris	Western whiptail
*Masticophis flagellum ruddocki**	San Joaquin coachwhip*
Uta stansburiana	Common side-blotched lizard

*Denotes special-status species

CONCLUSION

PruettBio completed protocol-level surveys following the criteria outlined in the 2019 CDFW methodology and did not observe BNLL individuals in either the adult or juvenile survey periods. A San Joaquin coachwhip, a California Species of Special Concern, was observed. No evidence of other special-status animal species, or animal species sign was observed during the field study.

REFERENCES

California Department of Fish and Wildlife. 2019. *Approved Survey Methodology for the Blunt-nosed Leopard Lizard.*

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APPENDIX A

PROJECT VICINTY AND SITE



Figure A-1. Aerial photograph of the project, vicinity, and special-status animal observations (Google Earth Pro 2025).



Figure A-2. Photograph of the project site taken from the NW corner facing S (June 26, 2025).



Figure A-3 Photograph of the project site taken from near the NW corner facing E (June 26, 2025).



Figure A-4. Photograph of the project site from near the SE corner facing N (June 26, 2025).



Figure A-5. Photograph of the project site taken from the SE corner facing W (June 26, 2025).

APPENDIX B

FIELD FORM RECORDS

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Date	Client	Project	Project Number	Task Number
5/15/25	Dewalt	Morning Dr.	DWCCC1	203

Surveyors (Underline Level 2's):
Jared P Jacob S Rebecca Gomez

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	1031	78	96.8	3.7	0%
Ending Data	1218	85	84.1	2.3	0%

Observations:

Total Side Blotched Observed:	24
Total Western Whiptail Observed:	0
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CGSQ, CORA, RTHA, TUVU, DECC, SAPH

Scanned ☐

Date	Client	Project	Project Number	Task Number
5/16/25	Dewalt	Morning Dr	DWC 001	2C3

Surveyors (Underline Level 2's):
Jared P Jacob S Rebecca Gomez

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0943	77	89	4.2	30%
Ending Data	1120	89.8	105.7	6.2	30%

Observations:

Total Side Blotched Observed:	21
Total Western Whiptail Observed:	–
Other Reptiles Observed (Insert Species):	Coachwhip 1
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CCRA, TUVU, CGSQ, RTHA, SAPH, DECO, BTJA

Scanned ☐

Date	Client	Project	Project Number	Task Number
26MAY	DENALT	EAST SIDE	001	

Surveyors (Underline Level 2's):
SPRUETT JSPRESTER
JPRATT RGOMEZ.

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	1108	78F	80F	17	
Ending Data	1226	91	113	65	

Observations:

Total Side Blotched Observed:	8 4 3 2 → 17
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

GASS COPA THNU MODO

Scanned ☐

Date	Client	Project	Project Number	Task Number
27MAY26	DENALI	MORNING DR	001	

Surveyors (Underline Level 2's):
SPRUETT RGOMEZ
JPRATT

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0936.	77°F	91° F	3	0 · HAZE
Ending Data	1114	79	111	3	0.

Observations:

Total Side Blotched Observed:	6.2.12 – 20
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CAGS CORA THVU MODO CLSW

Scanned ☐

Date	Client	Project	Project Number	Task Number
28MAY25	DENALT	MORNING.	001	

Surveyors (Underline Level 2's):
Jared P
Steve P
Rebecca G

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0845	77²	86⁴	43	10%
Ending Data	1018	88²	107⁴	18	10%

Observations:

Total Side Blotched Observed:	5 . 4 . 5 → 14
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CGSQ, MOPC, CORA

Scanned ☐

Date	Client	Project	Project Number	Task Number
5/29/23	Rewalt	Morning Dr	DWC 001	203

Surveyors (Underline Level 2's):

Jared Pratt Jacob Spriester Rebecca Gomez

Starting Data	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
	0854	77.0	84.1	3.1	0%
Ending Data	**Time**	**Air Temp**	**Soil Temp**	**Wind Speed**	**Cloud Cover**
	1028	84.0	106.3	2.2	0%

Observations:

Total Side Blotched Observed: 4, 5, 8	17
Total Western Whiptail Observed: ~~0~~	~~0~~
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

RTHA, CORA, CGSQ, DECO,

Scanned ☐

Date	Client	Project	Project Number	Task Number
09 JUN	DENALI	MORNING	001	

Surveyors (Underline Level 2's):
Steve P Jacob S
Rebecca G

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0810	82.7	86.8	4-4	0
Ending Data	0949	86.7	113.7	4-3	0

Observations:

Total Side Blotched Observed:	13 · 6 · 7 = 27
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

COPA TLNU HIL MODO PINA

CAGS DOGS DECO

Scanned ☐

Date	Client	Project	Project Number	Task Number
6JUN	DENALT	MORNING	001	

Surveyors (Underline Level 2's):
SPRUETT
JPRATT
P GOMEZ

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0809	85.8	91.3	6	0
Ending Data	0941	91.6	93.7	5.2	0

Observations:

Total Side Blotched Observed:	35. 6. 5 — 41
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CAGS DECO TLIVLI CORA

Scanned ☐

Date	Client	Project	Project Number	Task Number
17JUN	DENALT	MORNING	~~0~~1	

Surveyors (Underline Level 2's):

SPRUETT JSPREISTER

RGOMEZ

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	~~08~~21	77°F	85.3°F	5'	0
Ending Data	~~09~~51	89'F	103.4°F	3'	0

Observations:

Total Side Blotched Observed:	17.7.3 — 27
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

POPI TUVU CORA PIHA CLSW

CAGS DECO

Scanned ☐

Date	Client	Project	Project Number	Task Number
6/25/25	ReWalt	Morning Pr	DWC 001	203

Surveyors (Underline Level 2's):
J Pratt
J Sprmester
R Gomez

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0825	78.0	80.0	3.0	0%
Ending Data	0938	84.0	104.0	4.8	0%

Observations:

Total Side Blotched Observed: 7, 8, 10	25
Total Western Whiptail Observed:	0
Other Reptiles Observed (Insert Species):	coachwhip 1
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CGSQ, DECO, MODA, RTHA, CORA

Scanned ☐

Date	Client	Project	Project Number	Task Number
4/26/25	Dewalt	morning Dr	Dwc 001	203

Surveyors (Underline Level 2's):

J Pratt

J Sprecher

R Gomez

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0805	80.0	80.0	2.9	0%
Ending Data	0935	85.0	90.0	1.2	0%

Observations:

Total Side Blotched Observed: 9, 6, 9	24
Total Western Whiptail Observed:	–
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CGSQ, RTHA, DECO, MODO, TUVU

Scanned ☐

Date	Client	Project	Project Number	Task Number
6/27/25	Dwalt	mormy Pr	DWC 001	203

Surveyors (Underline Level 2's):
J Pratt
~~J Sprinkler~~
R Gomez

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0807	81.0	86.6	3.2	0%
Ending Data	0935	86.0	100.0	4.5	0%

Observations:

Total Side Blotched Observed:	11, 11, 8 30
Total Western Whiptail Observed:	-
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CORA, CGSQ,

Scanned ☐

Date	Client	Project	Project Number	Task Number
6/4/16	DENALT	DNC0601	DNC0001	

Surveyors (Underline Level 2's):
SPRUETT JPRATT
MPRUETT JSPRIESTER

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0800	78	79	<2	0
Ending Data	0917	85	90	1.0	0

Observations:

Total Side Blotched Observed:	7.7.6.13 = 33
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

DOG	PTHA
RAVEN	COTTONTAIL
DOVE	
CAG	
TUVU	

Scanned ☐

Date	Client	Project	Project Number	Task Number
18AUG25	DENALI	MORNING	DNC001	

Surveyors (Underline Level 2's):

MPRUETT SPRUETT

JSPRIESTER

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0800	77	79	<2	0
Ending Data	0900	85	91	<2	0

Observations:

Total Side Blotched Observed:	5 . 7 . 11 → 23
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

MODO, CORA, CGSQ

Scanned ☐

Date	Client	Project	Project Number	Task Number
19 ~~AUG~~	DENALT	MORNING DP	DNC~~05~~1	

Surveyors (Underline Level 2's):
SPRUETT JSPRIESTER
MPRUETT

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	~~0830~~	78	82	<2	0
Ending Data	~~0900~~	~~83~~	90	<2	0

Observations:

Total Side Blotched Observed:	7.5.9—21
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	/
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CORA, CGSQ, MODO, TUVU

Scanned ☐

Date	Client	Project	Project Number	Task Number
9/17/25	DeWalt	Morning Dr	BWC 001	203

Surveyors (Underline Level 2's):

JPratt

JSpriester

MPruett

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	0824	84.0	82.0	5.2	0%
Ending Data	1005	88.0	85.0	7.3	10%

Observations:

Total Side Blotched Observed: 8, 6, 6	UG 20
Total Western Whiptail Observed:	2
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

TUVU, CORA, CGSQ, CLSW, HOFI, RTHA

Scanned ☐

Date	Client	Project	Project Number	Task Number
9/19/25	DeWalt	Morning Dr	DWC001	203

Surveyors (Underline Level 2's):

J Pratt

J Sprioster

	Time	Air Temp	Soil Temp	Wind Speed	Cloud Cover
Starting Data	1114	82.0	88.4	5.4	80%
Ending Data	1330	87.0	82.0	2.2	70%

Observations:

Total Side Blotched Observed:	21
Total Western Whiptail Observed:	
Other Reptiles Observed (Insert Species):	
Other Reptiles Observed (Insert Species):	

BNLL Observed

Observer(s)	Sex	Age	Behavior	Notes

Additional Species Observed

CCRA, MeDO

APPENDIX C

APPROVED SURVEY METHODOLOGY FOR THE BLUNT-NOSED LEOPARD LIZARD
October 2019 (Revised)

October 2019

Dear blunt-nosed leopard lizard surveyor,

Attached is the revised survey methodology for the blunt-nosed leopard lizard (*Gambelia sila*). The protocol was developed by the Central and South Coast Regions of the California Department of Fish and Wildlife (CDFW) with input from the United States Fish and Wildlife Service (USFWS), the Bureau of Land Management, and various species experts. This protocol supercedes previous versions of CDFW survey protocols for the blunt-nosed leopard lizard (BNLL). The range-wide decline of population numbers in the past decade has provided the impetus for development of a more rigorous methodology to detect species presence. Additionally, since CDFW is not able to issue any form of take authorization for the blunt-nosed leopard lizard due to its status as a fully protected animal pursuant to Fish and Game Code section 5050, except as allowed in a Natural Communities Conservation Plan under Fish and Game Code section 2800 et seq., detection of species presence on a project site is crucial.

This standard methodology has been developed to provide consultants, local, state and federal agencies with minimum acceptable standards for surveys conducted to determine the status of this State and federally endangered species. The survey methods described within this protocol were designed to optimize the likelihood of detecting the presence of blunt-nosed leopard lizards should they occur on a project site.

When the presence of blunt-nosed leopard lizards is detected, we request that you notify the appropriate CDFW Region (Central or South Coast Regions) Permitting and Project Review staff for further instructions of additional information needed to assess the project's potential impact on the species. This will assist in expediting the review of the project and help control the project proponent's biological survey costs. Additionally, the USFWS should be contacted for further advice since this is also a federally-listed species. Use of this protocol and notification of CDFW does not exempt you from any required consultation with the USFWS.

CDFW is willing to coordinate with surveyors who have circumstances or needs not addressed by this protocol and who may wish to propose alternative methods to comply with State law prohibiting take of BNLL. If you have any questions or comments regarding this methodology or if you want to propose the use of a different methodology, please contact CDFW's Central Region Habitat Conservation Planning staff at (559) 243-4014 or South Coast Region Habitat Conservation Planning staff at (858) 467-4201 (for Santa Barbara and Ventura Counties).

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

APPROVED SURVEY METHODOLOGY FOR THE
BLUNT-NOSED LEOPARD LIZARD
October 2019 (Revised)

Blunt-nosed leopard lizard, *Gambelia sila*
STATUS: State Endangered, Federal Endangered, State fully protected

This protocol has been developed to provide a minimum level of protection for blunt-nosed leopard lizards (BNLL) when projects or maintenance activities are scheduled to occur within potential BNLL habitat. Disturbing activities should not proceed until appropriate surveys are conducted to determine if the species is present on the site. Surveys conducted according to the following protocol by qualified biologists provide a reasonable, although not conclusive, indication of BNLL presence at a particular site and yield critical information needed to prevent mortality and minimize impacts to the species. Individuals conducting the surveys are expected to understand the basic biological requirements of the species and have the ability to recognize potential BNLL habitat. This protocol satisfies the California Department of Fish and Wildlife (CDFW) requirements when it is determined that formal (e.g. "Protocol Level") BNLL surveys are needed. [Note: This protocol is appropriate for pre-project BNLL surveys, however, population monitoring over time on a site is best conducted using a permanent survey grid, such as described in Tollestrup (1976).]

METHODS:
A minimum of two surveyors, walking parallel on adjacent transects, should conduct a BNLL survey. Optimum BNLL activity periods occur when air temperature is between 25C-35C (77F-95F) (Tollestrup 1976; USFWS 1985, 1998). Surveys must be conducted when the air temperature falls within the optimal range. Air temperature should be measured at 1-2 cm above the ground over a surface most representative of the area being surveyed. Surveyors must shade the thermometer from direct sunlight while taking the reading. Surveys may begin after 0800 hours and the minimum air temperature criterion is met and must end by 1400 hours or when the maximum temperature is reached, whichever occurs first (Tollestrup 1976; Germano *in press*). Time of day and air temperature should be recorded at the start and end of each survey. Air temperature should be periodically checked to ensure that the maximum has not been exceeded. Other factors that affect BNLL activity, such as soil temperature (measured at 1 cm below soil surface with a shaded thermometer) and weather conditions, must be recorded at the start and end of each survey. Surveys should not be conducted on overcast days (cloud cover >90%) or when sustained wind velocity exceeds 10 mph (force >3 on Beaufort wind scale) (Montanucci 1965; Tollestrup 1976; J. Vance, pers. comm.).

Surveys must be conducted on foot, and all areas with potential BNLL habitat must be surveyed. BNLL are often difficult to detect, particularly in areas where shrubs are fairly numerous (>30% cover) and/or the herbaceous vegetation is dense and tall (>30 cm). In such conditions, no greater than 10-meter-wide transects should be walked at a slow pace. In areas with few shrubs and shorter herbaceous vegetation (<10 cm), transects as wide as 20 meters are acceptable. When feasible, transects should be walked in a north-south orientation to minimize glare from the sun. The surveyor should stop periodically and scan

the transect for BNLL using close-focusing binoculars (minimum 7X35 magnification), including areas surrounding the project site. In addition to recording the location of all BNLL observed (UTM or latitude/longitude WGS84 coordinates), the presence of habitat features important for BNLL (washes, playas, relative abundance of small mammal burrows) should also be recorded for each transect. Streambeds, washes, roads, etc., should be walked in addition to transect lines since BNLL are often seen in these areas.

TIMING AND LENGTH OF SURVEY:
Survey intensity should be commensurate with the anticipated level of disturbance to the BNLL habitat. The primary concern for BNLL when disturbance occurs during maintenance activities is direct mortality from equipment or personnel. Removal of intact BNLL habitat has a much greater potential for take due to direct impact on animals aboveground as well as any hibernating animals or eggs underground. A longer survey effort including both spring adult surveys and fall hatchling surveys is therefore required for activities that cause impacts to BNLL habitat. The more intensive survey effort increases the chances of observing the species, even if the population is small. Once a BNLL has been observed, consultation with CDFW must begin regarding whether surveys should continue to determine distribution within the project site and to develop avoidance measures. If BNLL are observed incidentally while conducting surveys for other species, specific surveys for BNLL may not be required since presence has been established unless they are necessary to determine distribution within the project site. Surveys will be accepted for one year from the date of completion.

SURVEYS FOR DISTURBANCES FOR MAINTENANCE ACTIVITIES:
Examples of maintenance activities include grading existing roads, grass mowing on roadsides, and maintaining existing structures (except for maintenance requiring excavation for underground infrastructure). BNLL are active and above ground from April through September, but optimum activity periods for adults occur between April 15 and July 15 (Montanucci 1965; Tollestrup 1979; USFWS 1985, 1998, 2010). BNLL surveys should be conducted for a total of 8 days over the course of the 90-day time span. A minimum of 3 survey days should be conducted consecutively, with a maximum of 6 survey days completed within any 30-day time period. Fall hatchling surveys are not required for activities in this category.

SURVEYS FOR DISTURBANCES LEADING TO HABITAT REMOVAL:
Examples of disturbances that impact intact habitat include establishment of new roads or structures, solar development, oil development, residential development, changes in land use (e.g. conversion to irrigated agriculture), and excavations such as installation or maintenance of underground infrastructure. Adult BNLL surveys should be conducted for 12 days over the course of the 90-day adult optimal survey period (April 15 to July 15), with a maximum of 4 survey days per week and 8 survey days within any 30-day time period. At least one survey session should be conducted for 4 consecutive days. BNLL hatchlings and subadults are most commonly observed from August 15 to September 30, along with a few adults that are still active above ground (Germano et. al 1994; Montanucci 1965; Tollestrup 1979; USFWS 1985, 1998, 2010; J. Battistoni, pers. comm.). In addition to the 12 days of adult BNLL surveys required for activities in this category, 5 additional survey days are required during the hatchling optimal survey period listed above, with at least 2 survey days conducted between August 15-30 and at least 2 survey days between September 15-30, for a total of 17 survey days overall within the same survey season/calendar year.

QUALIFICATIONS OF SURVEYORS:
An acceptable BNLL survey crew should consist of no more than 3 Level I surveyors for every Level II surveyor. This restriction should reduce the number of incorrect/missed identifications. The names and affiliations of all surveyors must be recorded for each survey day.

Level I: Surveyor has demonstrated the ability to distinguish BNLL from other common lizard species that may inhabit the area;

Level II: Surveyor has demonstrated the ability to distinguish BNLL from other common lizard species that may inhabit the area and has participated in at least 50 survey days for BNLL (or 25 survey days and a BNLL identification course recognized by/acceptable to CDFW). Surveyor has made at least one confirmed* field sighting of a BNLL.

Before surveys commence, CDFW recommends that surveyor qualifications be submitted to CDFW for the assessment of surveyor level qualifications.

*A minimum of one confirmed field sighting must be documented for each Level II surveyor and be available to CDFW upon request. As with all BNLL sightings, it should also be submitted to the CNDDB. Information to be included in documentation of BNLL sighting: Name of surveyor, date of survey, location of survey, names of accompanying Level II surveyors who can confirm the sighting, and details of sighting (distance, BNLL activity, etc).

REPORTING:
All BNLL survey results should be submitted to CDFW. Survey report(s) should include, at a minimum, the project contact, a brief project description, type of habitat disturbance, project location, habitat description, survey methodologies, survey dates, weather conditions, surveyors and their qualifications (identify the Level II surveyor(s)), acres or areas surveyed per day, mapping, other special status species sightings, and survey results with data sheets (sample data sheet is attached). Adequate mapping should include general project location, survey area with aerial imagery, and special status species locations with UTM or latitude/longitude WGS84 coordinates.

In order for a BNLL survey effort (that resulted in a negative finding of BNLL on a project site) to be accepted by CDFW as a negative finding, a survey report must be submitted to CDFW for review a minimum of 30 calendar days prior to Project commencement.

Submit report to:

California Department of Fish and Wildlife
Central Region
ATTN: Habitat Conservation Planning Supervisor
1234 E. Shaw Ave
Fresno, CA 93710

OR

California Department of Fish and Wildlife
South Coast Region
ATTN: Habitat Conservation Planning Supervisor
3883 Ruffin Road
San Diego, CA 92123

In addition, all BNLL observations should be reported to the California Natural Diversity Database (CNDDB) and the appropriate CDFW Region within 30 days of survey completion. Data submission guidance to CNDDB can be obtained at https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.

SPECIAL REQUIREMENT FOR SURVEYS IN SAN LUIS OBISPO, SAN BENITO, SANTA BARBARA, AND VENTURA COUNTIES

Projects with potential BNLL habitat in San Luis Obispo, San Benito, Santa Barbara, and Ventura Counties have different conditions compared to potential BNLL habitat in the San Joaquin Valley. The sites with habitat in these counties tend to be at higher elevations, where nighttime temperatures can remain low even though daytime temperatures meet minimum survey criteria. In such conditions, BNLL activity is likely to be low and surveys could result in non-detection of the species even though they are present. As such, an additional requirement of a visit to a known voucher site to check for BNLL activity applies to surveys conducted in these counties. Once the species has been observed at the voucher site, formal surveys can begin. The Carrizo Plain ER located on the Elkhorn Plain has been selected as the voucher site for these counties.

CONTACT INFORMATION

California Department of Fish and Wildlife

Central Region
Habitat Conservation Planning
1234 Shaw Ave
Fresno, CA 93710
(559) 243-4005

South Coast Region
Habitat Conservation Planning
3883 Ruffin Road
San Diego, CA
(858) 467-4201

CDFW is willing to coordinate with surveyors who have circumstances or needs not addressed by this protocol and who may wish to propose alternative methods to comply with State law prohibiting take of BNLL.

LITERATURE CITED

Germano, D.J., D.F. Williams, W. Tordoff III, 1994. Effect of drought on blunt-nosed leopard lizards (*Gambelia sila*). Northwestern Naturalist 75(1): 11-19.

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United States Fish and Wildlife Service (USFWS). 1985. Revised blunt-nosed leopard lizard recovery plan. United States Fish and Wildlife Service. Region 1, Portland, OR. 85 pp.

USFWS. 1998. Recovery plan for upland species of the San Joaquin Valley, California. United States Fish and Wildlife Service. Region 1, Portland, OR. 319 pp.

USFWS. 2010. Blunt-nosed leopard lizard (*Gambelia sila*) 5-year review: summary and evaluation. Sacramento Fish and Wildlife Office, USFWS, Sacramento, CA, USA.

PERSONAL COMMUNICATIONS

Julie Vance, California Department of Fish and Wildlife, Central Region, 1234 East Shaw Ave., Fresno, California, 93710.

John Battistoni, California Department of Fish and Wildlife, Central Region, 1234 East Shaw Ave., Fresno, California, 93710.

Blunt-Nosed Leopard Lizard Survey Reporting Form

SURVEY DATE(S) (up to 5 days of surveys from a single site can be reported on this form): _____

SURVEYORS: _____

_____

SITE NAME [Please also attach or sketch a map on back]: _____

County:_____ **Landowner/Mgr:** _____

Quad Name: _____ **Elevation:** _____

T _____ **R** _____ _____ **¼ of Section** _____

UTM Zone (10,11): _____ **Datum:** _____ **(NAD83, NAD27, WGS84, other)**

Source (GPS, map & type, other): _____ **Point Accuracy** _____**meters**

COORDINATES: _____

SURVEY RESULTS

DATE	START TIME	END TIME	START AIR TEMP	END AIR TEMP	# BNLL OBSERVED Adults/Hatchlings	PERSON-HOURS (# Surveyors) X (# Hours Walked)	APPROXIMATE DISTANCE COVERED (IN TENTHS OF A MILE)
					/		
					/		
					/		
					/		
					/		

TOTAL NUMBER OF OBSERVATIONS FOR THE THREE MOST COMMON LIZARD SPECIES ENCOUNTERED (combined numbers for all survey days):

Species _____ Number Observed: _____

Species _____ Number Observed: _____

Species _____ Number Observed: _____

Reporting Form Pg 2 **BNLL Survey Site Name:** _____

HABITAT DESCRIPTION: General description of vegetation community, overall habitat quality, surrounding land use, threats, etc: _____

_____

_____

_____

HABITAT DESCRIPTION: Estimation of Average Vegetative Cover on the Site [circle the correct value]:

% Shrub:	0-10%,	10-25%,	25-50%,	50-75%,	>75%
% Forb:	0-10%,	10-25%,	25-50%,	50-75%,	>75%
% Grass:	0-10%,	10-25%,	25-50%,	50-75%,	>75%
% Bare Ground:	0-10%,	10-25%,	25-50%,	50-75%,	>75%

NOTES ABOUT THE SURVEY/HABITAT/SPECIAL-STATUS SPECIES/ETC:

_____

_____

_____

_____

PLEASE RETURN THIS SURVEY REPORTING FORM TO THE APPROPRIATE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE REGION AT THE FOLLOWING ADDRESS:

California Department of Fish and Wildlife
Central Region
ATTN: Habitat Conservation Planning Supervisor
1234 East Shaw Avenue
Fresno, CA 93710

OR

California Department of Fish and Wildlife
South Coast Region
ATTN: Habitat Conservation Planning Supervisor
3883 Ruffin Road
San Diego, CA 92123

*****ALL OBSERVATIONS OF BLUNT-NOSED LEOPARD LIZARDS AND OTHER SPECIAL STATUS SPECIES SHOULD BE PROMPTLY REPORTED TO THE CALIFORNIA NATURAL DIVERSITY DATABASE (CNDDB). SUBMISSION OF THIS FORM DOES NOT ENTAIL REPORTING TO THE DATABASE, WHICH IS MAINTAINED BY THE BIOGEOGRAPHIC DATA BRANCH OF CDFW. PLEASE SEE THE SURVEY PROTOCOL FOR DIRECTIONS ON REPORTING TO CNDDB.**