

Project Summary Sheet – Year 2004

Project Name SGS-LTER Long-term Monitoring Project - Spotlight Rabbit Count

Project Number 98-1

Principal Investigator(s) Paul Stapp

Dates of Data Collection 4/14/04, 4/15/04, 4/21/04, 7/19/04, 10/4/04, 1/12/05

Plot Names / Specific Location of study area(s) _____

CPER Rabbit Count & Scat Count Transect

Full Names of Data Collectors Mark Lindquist, Paul Stapp, Nicole Kaplan, Safi Darden, Sara Cain, Teresa Friedrich, Amariah Anderson, Kevin Dudley, Lise Steffensen, Dan Tripp, Dan Sulleid, Becky Greenwood, Seth Ratering, K. Ramans, Laura Jamison, Jamie Weaver, Laurel Hartley

Names of Associated Files and Databases ascalon^{lite} / projects / data entry /
ARS # 98-LT-Animal-Mon-Data / lagomorphs / all lag⁵ xls

Summary of Data Collected (How are data sheets organized? How many pages are in each section? etc.)

3 nights { 1/15/04 - 3 pgs.
4/14/04 - 3 pgs. 7/19/04 - 4 pgs.
4/15/04 - 2 pgs. 10/4/04 - 3 pgs.
4/21/04 - 3 pgs. 1/12/05 - 3 pgs.

Questions and Concerns

Date copies of data sheets were sent to PI(s) 1/26/05

Date copies of data sheets were sent to SGS-LTER office 9/04

Names of any other persons given copies of data sheets _____

Mark Lindquist

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: CPER PNG

①

LETO - white
LECA - Black
SYAU - cotton

DATE (day-month-year) Jan, 12, 2005

OBSERVERS MOL, A. Anderson, S. Darden, L. Steffen
Don Sullivan, P. Stapp

WEATHER clear, cold

START TIME 1808

END TIME 21:41

INITIAL MILEAGE 0

END MILEAGE 20.75

SYAU 6 LETO 5
LECA 28 LESP 1

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	0.3	110	1	18:11	NSE ⊗	MS	GR	
LECA	0.3	110	1	18:11	NSE ⊗	MS	GR	
LECA	0.3	110	1	18:11	NSE ⊗	MS	GR	
LECA	0.9	38	1	18:18	NSE W	RG	GR	
VUVE	1.6	-	1	18:29	NSE ⊗	FL	GR	
VUVE	2.1	-	1	18:33	⊗ NSE W	FU	GR	
SYAU	3.6	71	2	18:46	NSE W	FL	MX	
LECA	3.65	41	1	18:48	⊗ NSE W	FL	MX	Near enclosure
LECA	3.85	38	1	18:50	NSE W	FL	MX	Near enclosure
LECA	4.0	51	2	19:00	NSE W	FU	MX	
LECA	5.7	36	1	19:09	NSE W	FU	MX	
SYAU	6.0	29	1	19:14	NSE ⊗	ARS P. lot HU Rd. 37	HUBLOC	
LECA	6.4	0.0	1	19:18	NSE W	Rd. 37	MX	
LECA	7.1	101	1	19:23	NSE ⊗	Rd. 37	MX	
LECA	7.65	35	1	19:27	NSE ⊗	Rd. 37	MX	
VUVE	9.1	-	1	19:38	NSE W	FL	MX	
LECA	9.65	16	1	19:44	NSE W	FL	MX	
LECA	11.8	47	1	20:06	NSE W	FL	MX	

(18 rows)

Topography codes:

FU flat upland

FL flat lowland

MS midslope

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

RG ridgetop

SW swale

CR creek drainage

AC saltbush

YU yucca

MX mixed grassland (MXAC or MXYU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

* Look @ temp variations b/w nights as a predictor

* Look @ use of alfalfa fields & see how they change

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

Jan

CIRCLE ONE: CPIR PNG

(2)

DATE (day-month-year) 12.1.05OBSERVERS MDL A Anderson, S Darden, L. SteffensenD. Sullfeld P StappWEATHER Clear ColdSTART TIME 1908END TIME 2141INITIAL MILEAGE 0END MILEAGE 20.75

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	12.65	0.0	1	20:14	N S <u>W</u>	FU	GR	
LECA	12.9	29	1	20:16	N S <u>W</u>	FU	GR	
LECA	13.55	4.0	1	20:25	N S E <u>W</u>	FU	GR	
LECA	13.95	56	1	20:29	N S E <u>W</u>	FU	GR	
LECA	14.2	4.5	1	20:31	N S E <u>W</u>	MS	GR	
SYAU	14.5	44	1	20:36	<u>N</u> S E W	FU	MX	
LECA	14.6	0.0	1	20:38	N <u>S</u> E W	CR	AC	
LECA	14.8	8.5	1	20:40	N <u>S</u> E W	MS	AC	
SYAU	15.2	20	1	20:43	<u>N</u> S E W	MS	MX	
LECA	15.3	59	1	20:45	<u>N</u> S E W	FU	MX	
LETO	16.0	85	1	20:51	N <u>S</u> E W	FU	GR	
LETO	16.25	93	1	20:54	N S E <u>W</u>	FU	GR	
SYAU	16.45	78	1	20:58	<u>N</u> S E W	FU	YU → Near HU	
LETO	17.4	98	1	21:07	N S <u>W</u>	FL	GR	
LECA	17.85	152	3	21:13	N S <u>W</u>	MS	GR	
LETO	18.4	125	2	21:18	<u>N</u> S E W	FU	GR	
LECA	18.9	31	1	21:23	<u>N</u> S E W	MS	GR	
Jack rabbit(?)	19.0	249	1	21:25	N S <u>W</u>	FL	GR	VULVE too

(18 rows)

Topography codes:**Vegetation codes:**

FU flat upland RG ridgetop AC saltbush GR grassland
 FL flat lowland SW swale YU yucca HU human structure (<30 m)
 MS midslope CR creek drainage MX mixed grassland (MXAC or MXYU)
 HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded
 MX mixed grassland (w/AC or YU)

Tan

3

OBSERVERS MDL, A. Anderson, S. Darden, L. Steffensen

Dan Sulek, P. Stapp

WEATHER Clear cold

START TIME 1808

END TIME 2141

INITIAL MILEAGE 0

END MILEAGE 20.75

* Drivers side
spot light went
out - using Mark's
light on car now for
left side to
compensate

Topography codes:

Vegetation codes:

FU flat upland	RG ridgetop	AC saltbush	GR grassland
FL flat lowland	SW swale	YU yucca	HU human structure (<30 m)
MS midslope	CR creek drainage	MX mixed grassland (MXAC or MXYU)	
HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded			
MX mixed grassland (w/AC or YU)			

SGS-LTER Long-Term Monitoring Project

Spotlight Rabbit Count

CIRCLE ONE: CPER PNGDATE (day-month-year) 4 October 2004OBSERVERS M. Lindquist, A. Anderson, S. Radering, K. Dudley, K. RamansWEATHER Clear, Cool. 24 hr. precipitation = 0.01START TIME 19:45 END TIME 22:54INITIAL MILEAGE 0.0 END MILEAGE 20.7

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
SYAU	0.1	24m	1	19:45	N S <u>E</u> W	MS	GR	
SYAU	0.2	42m	1	19:46	N S <u>E</u> W	MS	GR	
SYAU	0.5	7	1	19:47	N S E <u>W</u>	MS	GR	
SYAU	0.8	20	1	19:50	N S E <u>W</u>	MS	GR	
LECA	1.6	33	2	19:57	N S E <u>W</u>	FL	GR	
LETO	1.9	83	1	20:01	N S E <u>W</u>	FU	GR	
LETO	2.5	51	1	20:06	N S <u>E</u> W	MS	GR	
LECA	3.5	90	1	20:15	N <u>S</u> E W	FL	MXAC	
SYAU	4.3	15	1	20:22	N S E <u>W</u>	MS	YU	
LECA	4.9	27	1	20:28	N <u>S</u> E W	FU	MXAC	
SYAU	5.7	24	2	20:35	N S <u>E</u> W	FL	MXAC	
SYAU	5.7	45	1	20:36	N S <u>E</u> W	FL	MXAC	
SYAU	5.7	20	1	20:36	N S E <u>W</u>	FL	MXAC	
LECA	7.8	108	1	20:52	N S <u>E</u> W	FL	MXAC	
SYAU	8.0	73	1	20:54	N S <u>E</u> W	FL	MXAC	
LECA	8.7	77	1	20:57	N S E <u>W</u>	FL	GR	always field
LECA	8.8	57	2	21:00	N S E <u>W</u>	FL	GR	always field
LECA	9.7	21	1	21:10	N S E <u>W</u>	FL	MXAC	

(18 rows)

Topography codes:

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Vegetation codes:

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: CPER PNGDATE (day-month-year) 4 Oct. 2004OBSERVERS M. Lindquist, Anderson, S. Katenberg, K. Dudley
K. RamansWEATHER Clear Cool 24hr. precipitation = 0.01START TIME 19:45 END TIME 22:54INITIAL MILEAGE 0.0 END MILEAGE 20.7

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	9.8	40	1	21:13	<u>N</u> SEW	FL	MXAC	
SYAU	11.4	32	1	21:29	<u>N</u> SEW	FL	MXAC	
LECA	11.8	43	2	21:34	NSE <u>W</u>	FL	GR	
LECA	12.6	55	1	21:41	NSE <u>W</u>	FU	GR	
UKN. Rabbit	12.75	34	1	21:44	NSE <u>W</u>	FU	HU	
LECA	12.9	19	1	21:45	NSE <u>W</u>	FU	GR	
LECA	13.1	59	1	21:47	NSE <u>W</u>	FU	GR	
LECA	13.2	69	2	21:48	NSE <u>W</u>	FU	GR	
LECA	13.5	112	2	21:52	NSE <u>W</u>	FU	GR	
LECA	14.1	91	2	21:58	NSE <u>W</u>	FU	GR	
LECA	14.2	135	1	21:59	NSE <u>W</u>	FU	GR	
SYAU	14.9	19	1	22:04	<u>N</u> SEW	FL	MXAC	
LECA	15.1	31	1	22:07	<u>N</u> SEW	FL	MXAC	
LETO	16.0	10	1	22:12	NSE <u>W</u>	FU	GR	
SYAU	16.4	113	1	22:18	<u>N</u> SEW	FU	GR	
SYAU	16.5	17	1	22:19	N <u>S</u> EW	FU	MXU	
LETO	17.2	23	2	22:25	NSE <u>W</u>	FU	GR	
LECA	17.8	7	1	22:30	NSE <u>W</u>	RG	GR	

(18 rows)

Topography codes:

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RG ridgetop

AC saltbush

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SW swale

YU yucca

MS midslope

CR creek drainage

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MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: CPER PNGEnd Time 22:54Mileage: 20.7DATE (day-month-year) 4 October 2004OBSERVERS M. Lindquist, A. Anderson, S. Katenberg, K. Dudley,
K. RamansWEATHER Clear cool 24 hr. precipitation = 0.01START TIME 19:45END TIME 22:54INITIAL MILEAGE 0.0END MILEAGE 20.7

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	19.2	30	1	22:40	N S <u>(E)</u> W	FU	GR	
LECA	19.25	67	1	22:42	N S E <u>(W)</u>	FU	GR	
LECA	19.3	27	1	22:43	N S E <u>(W)</u>	FU	GR	
LECA	19.75	22	1	22:47	N S E <u>(W)</u>	FU	MXAC	
LECA	20.4	43	1	22:50	<u>(N)</u> S E W	FL	MXAL	
LECA	20.5	0	1	22:51	N <u>(S)</u> E W	FL	GR	
LECA	20.5	19	1	22:51	<u>(N)</u> S E W	FL	GR	
LECA	20.5	67	1	22:53	<u>(N)</u> S E W	FL	GR	
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			

(18 rows)

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FU flat upland RG ridgetop AC saltbush GR grassland
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 MX mixed grassland (w/AC or YU)

Vegetation codes:

SGS-LTER Long-Term Monitoring Project

Spotlight Rabbit Count

CIRCLE ONE: CPER PNGDATE (day-month-year) 19-01-04OBSERVERS M. Lindquist, S. Ratering, B. Greenwood, K. Dudley,
S. CainWEATHER clear, chillySTART TIME 11:20 amEND TIME 12:50 pmINITIAL MILEAGE 6END MILEAGE 20.5

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	11.2	16m	1	1125	<u>NSEW</u>	FU	GR	
LECA	12.0	8m	1	1133	<u>NSEW</u>	FU	FL	
LECA	13.0	88m	1	1137	<u>NSEW</u>	FU	FL	
LECA	15.2	20m	1	1144	<u>NSEW</u>	FU	SC	
SVAN	15.2	118m	1	1146	<u>NSEW</u>	FU	GR	
LECA	15.8	12m	2	1147	<u>NSEW</u>	FU	GR	
LECA	16.2	43m	1	1148	<u>NSEW</u>	FU	GR	
LETO	17.0	70m	1	1152	<u>NSEW</u>	MS	GR	
LETO	17.4	41m	1	1159	<u>NSEW</u>	FU	GR	
LETO	17.8	26m	1	1162	<u>NSEW</u>	FU	GR	
LECA	17.85	94m	1	1166	<u>NSEW</u>	FU	GR	
LECA	18.3	37m	1	1175	<u>NSEW</u>	RG	GR	
LECA	18.7	21m	1	1178	<u>NSEW</u>	RG	GR	
LECA	19.0	22m	1	1181	<u>NSEW</u>	MS	GR	
LECA	19.6	26m	3	1186	<u>NSEW</u>	FU	GR	
LECA	19.75	19m	1	1139	<u>NSEW</u>	FU	GR	
LECA	20.0	76m	1	1142	<u>NSEW</u>	FL	GR	
BADGER	20.5		1	1145	<u>NSEW</u>	FL	GR	

(18 rows)

Topography codes:

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Vegetation codes:

SGS-LTER Long-Term Monitoring Project
 Spotlight Rabbit Count

CIRCLE ONE:

CPER

PNG

 DATE (day-month-year) 19-7-04

 OBSERVERS M. Lindquist, S. Ratering, B. Greenwood, K. Dudley, S. Cain

 WEATHER Clear, Chilly

 START TIME 9:29 PM

 END TIME 1:45 am

 INITIAL MILEAGE 0

 END MILEAGE 20.55

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	0.15	4 m	2	9:33	N S <u>(E)</u> W	FU	GR	
SYAU	0.20	54 m	2	9:34	N S E <u>(W)</u>	FU	GR	
SYAU	0.35	63 m	2	9:37	N S <u>(E)</u> W	FU	GR	
LECA	0.40	7.0 m	1	9:39	N S <u>(E)</u> W	FU	GR	
LECA	0.55	65 m	1	9:41	N S <u>(E)</u> W	FU	GR	
SYAU	0.60	9.0 m	1	9:42	N S <u>(E)</u> W	FU	GR	
LECA	1.0	25 m	1	9:47	N S E <u>(W)</u>	MS	GR	
NANM	1.0		2	9:48	N S <u>(E)</u> W	MS	GR	
LE ?	1.3	154 m	1	9:51	N S E <u>(W)</u>	MS	GR	
VUVE	1.3		1	9:53	N S E <u>(W)</u>	SW	MX	
ANAM	1.4		1	9:56	N S <u>(E)</u> W	SW	MX	
LECA	1.55	0.0	1	9:57	N S E <u>(W)</u>	SW	MX	
LE ?	1.55	43 m	1	9:58	N S <u>(E)</u> W	SW	MX	
VUVE	1.9		1	10:03	N S <u>(E)</u> W	FU	GR	
LECA	2.3	49 m	1	10:06	N S E W	FU	GR	
LETO	2.9	35 m	1	10:14	N <u>(S)</u> E W	FU	MX	
LETO	3.5	124 m	1	10:21	N <u>(S)</u> E W	FL	MX	
VUVE	3.7		1	10:23	N S E W	FL	MX	

(18 rows)

Topography codes:

FU flat upland

RG ridgetop

AC saltbush

FL flat lowland

SW swale

YU yucca

MS midslope

CR creek drainage

MX mixed grassland (MXAC or MXYU)

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

SGS-LTER Long-Term Monitoring Project
 Spotlight Rabbit Count

CIRCLE ONE:

CPER

PNG

 DATE (day-month-year) 19-7-84

 OBSERVERS M. Lindquist, S. Paterning, B. Greenwood
K. Dudley, S. Carr

 WEATHER Clear, Chilly

 START TIME 9:29 pm

 END TIME 1:45 am

 INITIAL MILEAGE 0

 END MILEAGE 20.55

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
SYAU	3.9	35 m	1	10:28	N(S)EW	FL	MX	
SYAU	4.1	24 m	1	10:31	NSEW	RG	MX	yucca
SYAU	4.25	40 m	1	10:33	NSEW	RG	MX	
SYAU	4.4	0.0 m	1	10:36	NSEW	MS	MX	
SYAU	4.45	2.0 m	1	10:36	NSEW	MS	MX	
CALA	4.5		1	10:38	NSEW	MS	MX	
LECA	4.8	0.0	1	10:41	NSEW	FL	MX	
LECA	4.9	72 m	3	10:42	NSEW	FL	MX	
SYAU	5.1	21 m	1	10:45	NSEW	FL	MX	
LECA	5.3	63 m	1	10:48	NSEW	FL	MX	
SYAU	5.8	13 m	1	10:53	NSEW	FL	MX	
SYAU	6.0	0.0 m	1	10:57	NSEW	FU	MX	
LECA	8.4	65 m	2	11:15	NSEW	FL	MX	
LECA	8.5	96 m	2	11:17	NSEW	FL	MX	
LECA	8.55	46 m	1	11:18	NSEW	FL	MX	
CALA	8.9		1	11:20	NSEW	FL	MX	
LECA	9.0	34 m	1	11:21	NSEW	FL	MX	
LECA	9.3	0.0 m	1	11:25	NSEW	FL	MX	

(18 rows)

Topography codes:

FU flat upland

FL flat lowland

MS midslope

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

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MX mixed grassland (MXAC or MXYU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

SGS-LTER Long-Term Monitoring Project
Spotlight Rabbit Count

CIRCLE ONE: CPER PNG

DATE (day-month-year) 17-11-04

OBSERVERS M. Lindquist, S. Ratering, B. Greenwood, K. Dudley
S. Cain

WEATHER Clear, Chilly

START TIME 9:29 pm

END TIME 1:45 am

INITIAL MILEAGE 0

END MILEAGE 20.85

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	9.6	8.0m	1	11:28	NSEW	TL	MX	
LECA	9.6	42m	1	11:29	NSEW	TL	MX	
LECA	9.8	65m	2	11:35	NSEW	FL	MX	
LECA	10.05		2	11:41	NSEW	FL	MX	
LECA	10.06	89m	1	11:42	NSEW	FL	MX	
LECA	10.25	100m	1	11:44	NSEW	FL	MX	
LECA	10.28	40m	1	11:49	NSEW	FL	MX	
LECA	10.29	20m	2	11:51	NSEW	FL	MX	
LECA	10.33	0m	1	11:56	NSEW	RG	MX	
LECA	10.83	20m	1	12:04	NSEW	MS	GR	
LECA	13.00	40m		12:10	NSEW	FL	GR	
LECA	13.10	57m	2	12:15	NSEW	FL	GR	
LECA	13.10	FL	1	12:21	NSEW	FL	GR	
LECA	13.55		1	12:24	NSEW	FL	GR	
LECA	13.7	150m	2	12:26	NSEW	FL	GR	
LECA	14.05	50m		12:27	NSEW	FL	GR	
LECA	14.30	4m	2	12:34	NSEW	FL	MX	
LECA	14.6	25m	1	12:38	NSEW	FL	MX	

(18 rows)

Topography codes:

FU flat upland RG ridgetop AC saltbush GR grassland
 FL flat lowland SW swale YU yucca HU human structure (<30 m)
 MS midslope CR creek drainage MX mixed grassland (MXAC or MXYU)
 HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded
 MX mixed grassland (w/AC or YU)

Vegetation codes:

SGS-LTER Long-Term Monitoring Project
Spotlight Rabbit Count

CIRCLE ONE: CPR PNG

DATE (day-month-year)

21 April 04

OBSERVERS

Paul Stapp, Mark Lindquist, Nicole Kaplan, Teresa Friedrich
(3 observers in back)

WEATHER

mostly cloudy 36°F

START TIME

0845 2045

END TIME

0114 0114

INITIAL MILEAGE

0

END MILEAGE

20.5

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
SyAu	0.0	45	1	0847	NSE <u>W</u>	FL	GR	
SyAu	0.25	0	1	0850	<u>N</u> SE W	FU	GR	
SyAu	0.25	35	1	0850	NSE <u>W</u>	FU	GR	
SyAu	0.35	0	1	0852	<u>N</u> SE W	FU	GR	
SyAu	0.35	35	1	0852	NSE <u>W</u>	FU	GR	
SyAu	0.50	61	1	0855	NSE <u>W</u>	FU	MXU	
SyAu	0.55	37	1	0857	NSE <u>W</u>	MS	GR	
LeCa	0.85	4	1	0903	NSE <u>W</u>	MS	GR	
LeCa	1.1	81	1	0906	NSE <u>W</u>	FL	GR	
LeCa	2.6	56	1	0924	<u>N</u> SE W	MS	GR	
SyAu	3.2	17.0	1	0932	<u>N</u> SE W	MS	MXAC	
LeCa	3.4	54	1	0935	N <u>S</u> EW	MS	MXAC	
SyAu	4.1	3	1	0941	<u>N</u> SE W	RG	YU	
LeCa	4.6	53	1	0952	NSE <u>W</u>	SW	MXAC	
SyAu	4.75	8	1	0955	<u>N</u> SE W	FL	MXAC	
LeCa	5.25	127	2	1001	<u>N</u> SE W	FL	MXAC	
LeCa	5.5	117	2	1004	<u>N</u> SE W	FL	MXAC	
SyAu	5.7	48	1	1008	N <u>S</u> EW	FL	MXAC	

(18 rows)

Topography codes:

FU flat upland

RG ridgetop

AC saltbush

GR grassland

FL flat lowland

SW swale

YU yucca

HU human structure (<30 m)

MS midslope

CR creek drainage

MX mixed grassland (MXAC or MXU)

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

SGS-LTER Long-Term Monitoring Project
Spotlight Rabbit Count

2

CIRCLE ONE: CPER PNGDATE (day-month-year) 21 April 04OBSERVERS MDL, NEK, PS, Teresa F.WEATHER Mostly Cloudy, 36°FSTART TIME 2045END TIME 0114INITIAL MILEAGE 0END MILEAGE 20.5

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
SyAu	5.8	53	1	1010	N <u>S</u> E W	HU	GR	
SyAu	5.85	0	1	1010	N S <u>E</u> W	HU	GR	
Duwe	6.25	—	1	1016	N S E <u>W</u>	FU	GR	
Duwe	6.35	—	1	1018	N S E <u>W</u>	FU	GR	
Leca	7.35	410	1	1028	N S E <u>W</u>	FU	GR	
Leca	8.5	114	1	1039	<u>N</u> S E W	FL	Alfalfa	
Leca	9.0	66	3	1044	<u>N</u> S E W	FL	Alfalfa	
ANAM	9.9	—	4	1055	N S <u>S</u> W	FL	GR	
SyAu	10.9	60	1	1105	N <u>S</u> E W	FL	MXAC	
Leca	10.95	0	1	1107	N S E <u>W</u>	FL	MXAC	P-dog Town
	11.6	out of			<u>N</u> S E W			P Dog Town
Leca	12.3	54	2	1125	N S E <u>W</u>	FL	GR	Widrye
Leca	14.5	16	1	1152	<u>N</u> S E W	FL	MXAC	
Leca	14.55	21	1	1157	N <u>S</u> E W	FL	MXAC	
Leca	14.6	32	1	1157	N <u>S</u> E W	FL	MXAC	Sub Adc
Leca	14.7	25	1	1206	<u>N</u> S E W	FL	M/AC	
Leca	15.05	0	1	1209	N S E <u>W</u>	FL	MX/AC	
SyAu	15.15	29	1	1210	<u>N</u> S E W	FL	MX/AC	

(18 rows)

Topography codes:

FU flat upland

RG ridgetop

AC saltbush

FL flat lowland

SW swale

YU yucca

MS midslope

CR creek drainage

MX mixed grassland (MXAC or MXYU)

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

SGS-LTER Long-Term Monitoring Project
Spotlight Rabbit Count

CIRCLE ONE: CPER PNG

3

DATE (day-month-year) 21 April 04

OBSERVERS Paul Stapp, Mark Lindquist, Nicole Kaplan, Teresa Friedrich

WEATHER Rain / Sleet earlier in day; partly cloudy
START TIME 20.45 END TIME 1:14 Calm strong hant
INITIAL MILEAGE 0 END MILEAGE 20.5

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
Leca	15.5	106	1	12:14	N S <u>W</u>	FL	MX/AC	
Leca	15.8	25	1	12:18	N <u>S</u> E W	FL	GR	
SyAu	16.3	45	1	12:25	N <u>S</u> E W	FL	GR	
Leca	17.9	22	1	12:41	N S <u>W</u>	FL	GR	
ANAM	18.2	—	3	12:44	<u>N</u> S E W	RG	GR	
LeTo	18.65	0	1	12:48	N S E <u>W</u>	RG	GR	
SyAu	19.4	19	1	12:59	N S E <u>W</u>	FU	GR	
SyAu	19.7	14	1	1:00	N S E <u>W</u>	FU	GR	
SyAu	19.7	43	1	1:03	N S <u>W</u>	FU	GR	
Leca	20.1	73	1	1:11	<u>N</u> S E W	FL	MX/AC	
UnDe	20.5	—	1	1:14	<u>N</u> S E W	FU	<u>GR</u>	
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			

(18 rows)

Topography codes:

FU flat upland RG ridgetop AC saltbush GR grassland
FL flat lowland SW swale YU yucca HU human structure (<30 m)
MS midslope CR creek drainage MX mixed grassland (MXAC or MXYU)
HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded
MX mixed grassland (w/AC or YU)

Vegetation codes:

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: CPER PNGDATE (day-month-year) 15 April 2004OBSERVERS Dan Tripp, Jamie Weaver, Amariah Anderson
Laura Jamison, Mark LindquistWEATHER 50°FSTART TIME 8:33END TIME 12:11INITIAL MILEAGE 0END MILEAGE 20.50

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
Syau	0.25	41	1	8:38	N S <u>⊗</u> W	FU	GR	
Syau	0.50	54	1	8:42	N S <u>⊗</u> W	FU	MXU	
Leca	0.60	00	1	8:44	<u>⊗</u> S E W	SW	GR	Subadult
Syau	0.70	35	1	8:45	N S <u>⊗</u> W	RG	GR	
mumu	1.00		1	8:49	N S E <u>⊗</u>	FU	GR	
Leca	1.25	5	2	8:51	N S E <u>⊗</u>	MS	GR	
Leca	1.55	2	1	8:56	N S E <u>⊗</u>	FL	MXAC	
Anam	2.00		1	9:02	N <u>⊗</u> S E W	FU	GR	
Leto	2.55	4	1	9:08	N S E <u>⊗</u>	MS	GR	
Anam	2.65		1	9:10	N <u>⊗</u> S E W	MS	GR	
Syau	4.15	4	1	9:26	<u>⊗</u> S E W	RG	MXU	
Syau	4.70	7	1	9:33	N <u>⊗</u> S E W	FL	MXAC	
Syau	5.75	00	1	9:44	N <u>⊗</u> S E W	FL	MXAC	
Syau	5.80	3	1	9:44	N <u>⊗</u> S E W	FL	MXAC	
Anam	6.85		1	9:57	N S E <u>⊗</u>	FU	GR	
Syau	7.00	46	1	9:58	N S E <u>⊗</u>	FL	MXAC	
Rabbit UnKn	8.10	62	1	10:07	<u>⊗</u> S E W	FU	MXAC	
Feral Cat	8.30		1	10:09	<u>⊗</u> S E W	FU	MXAC	

(18 rows)

Topography codes:

FU flat upland

RG ridgetop

AC saltbush

GR grassland

FL flat lowland

SW swale

YU yucca

HU human structure (<30 m)

MS midslope

CR creek drainage

MX mixed grassland (MXAC or MXU)

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: CPER PNGDATE (day-month-year) 15 April 2004OBSERVERS Dan Tripp, Jamie Weaver, Amariah Anderson
Laura Jamison, Mark LindquistWEATHER 50°FSTART TIME 8:33END TIME 12:11INITIAL MILEAGE 0END MILEAGE 20.50

SPECIES	MILEAGE	(^m) DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
Leca	9.10	42	1	10:16	N <u>(S)</u> E W	FL	AC	
Leca	9.30	6	1	10:18	N <u>(S)</u> E W	FL	MXAC	
Leca	11.55	49	1	10:41	N <u>(S)</u> E W	SW	MXAC	
Anam	11.80		3	10:45	N S <u>(E)</u> W	FL	GR	
Leto	13.30	00	1	11:01	N <u>(S)</u> E W	FL	GR	
Anam	14.10		5	11:08	N S <u>(E)</u> W	FL	GR	
Leca	15.20	00	1	11:23	N S E <u>(W)</u>	FL	GR	
Leca	15.90	00	1	11:24	N S E <u>(W)</u>	FL	GR	
Leca	15.90	51	1	11:25	N <u>(S)</u> E W	FL	GR	
Leto	17.10		1	11:37	N S <u>(E)</u> W	MS	GR	
Leto	17.40	218	2	11:41	N S E <u>(W)</u>	FU	GR	mating
Leca	18.00	7	1	11:48	N S <u>(E)</u> W	RG	GR	
Leto	19.20	9	1	12:01	N S E <u>(W)</u>	FU	GR	
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			

(18 rows)

Topography codes:

FU flat upland

RG ridgetop

AC saltbush

FL flat lowland

SW swale

YU yucca

MS midslope

CR creek drainage

MX mixed grassland (MXAC or MXYU)

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE:

CPER

PNG

DATE (day-month-year) 14 April 2004

OBSERVERS M. Lindquist, A. Anderson, L. Hartley, N. Kaphan
J. Weaver

WEATHER 58°F, slightly breezy, cloudy, warm, 70s daytime

START TIME 8:17 p.m. or so

END TIME 0.13

INITIAL MILEAGE 0

END MILEAGE 20.55

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
SYAU	0.3	0.0	1	8:20	N S <u>E</u> W	MS	GR	
Leca	1.0	37m	2	20:26	N S E <u>W</u>	SW	GR	
Vuve	1.2	—	1	20:30	N S <u>E</u> W	MS	GR	has collar
Leto	1.2	23m	1	20:30	N S <u>E</u> W	MS	GR	
Leto	2.75	42m	1	20:48	<u>N</u> S E W	MS	GR	
Leto	2.85	0.0	1	20:50	N <u>S</u> E W	MS	GR	
Leto	2.9	15m	1	20:51	N <u>S</u> E W	MS	GR	
Leto	3.15	30m	1	20:54	<u>N</u> S E W	CR	MXAC	
Leto	4.0	11m	1	21:04	N <u>S</u> E W	MS	MXAC	subadult
Leca	4.45	2m	1	21:11	N S E <u>W</u>	SW	MXAC	
SYAU	4.9	9m	1	21:16	N <u>S</u> E W	FL	MXAC	
Leca	5.1	40m	1	21:24	<u>N</u> S <u>E</u> W	FL	MXAC	
SYAU	5.7	3m	1	21:31	N S <u>E</u> W	FL	MXAC	
SYAU	6.3	58m	1	21:37	N S E <u>W</u>	FL	MXAC	
Leca	7.05	36m	1	21:44	N S <u>E</u> W	FU	MXAC	
Leca	7.55	44m	1	21:49	N S <u>E</u> W	FU	MXAC	
Anim	8.2	—	2	21:55	<u>N</u> S E W	FU	MXAC	
Leca	8.95	36m	2	22:00	<u>N</u> S E W	FU	MXAC	

(18 rows)

+60m

Topography codes:

FU flat upland

RG ridgetop

AC saltbush

FL flat lowland

SW swale

YU yucca

MS midslope

CR creek drainage

MX mixed grassland (MXAC or MXYU)

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

Lots of tumbleweeds on fences

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: CPR PNGDATE (day-month-year) 14 April 2004OBSERVERS M. Lindquist, N. Kaplan, L. Hartley, J. Weaver, A. AnderssonWEATHER 58°F to start drops to 40s, breezy, cloudy, warm (low 70s) during daySTART TIME 20:17END TIME 0:13INITIAL MILEAGE 0END MILEAGE 20.55

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
Leca	10.4	66m	1	22:17	N <u>SE</u> W	SW	GR	
Leca	10.85	0.0	1	22:21	N S E W	FL	HU	
SYAU	10.9	9.5m	1	22:22	<u>N</u> S E W	FL	HU	
SYAU	11.225	58m	1	22:30	<u>N</u> S E W	MS	MXAC	
SYAU	11:30	2m	1	22:31	N <u>SE</u> W	SW	MXAC	
Anam	11.80		3	22:38	N S <u>E</u> W	FL	GR	
Leca	14.25	19m	1	23:03	N S <u>E</u> W	FU	MXAC	
Leca	14.55	74m	1	23:07	N <u>SE</u> W	FL	MXAC	
Leca	14.55	37m	1	23:08	N <u>SE</u> W	FL	MXAC	
SYAU	15	21m	1	23:12	<u>N</u> S E W	FU	MXAC	
Leca	15.1	107m	1	23:14	N <u>SE</u> W	FL	MXAC	
SYAU	15.3	0.0	1	23:16	N <u>SE</u> W	FL	MXAC	
Leca	15.7	0.0	1	23:20	N S E <u>W</u>	FL	GR	
Leca	15.85	8m	1	23:22	N S E <u>W</u>	FL	HU	windmill
Leto	17.45	47m	1	23:40	N S E <u>W</u>	RG	GR	
Leto	17.55	75	1	23:44	N S E <u>W</u>	RG	GR	
Leto	17.7	6.0m	1	23:45	N S E <u>W</u>	MS	GR	
Leto	17.7	30m	1	23:45	N S <u>E</u> W	MS	GR	

(18 rows)

Topography codes:

FU flat upland

RG ridgetop

FL flat lowland

SW swale

MS midslope

CR creek drainage

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

AC saltbush

YU yucca

MX mixed grassland (MXAC or MXYU)

HU human structure (<30 m)

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: (CPER) PNGApril : 3 night counts
need to be doneDATE (day-month-year) 15.01.04.OBSERVERS LARS, SATHI, PAULWEATHER (30-35% cloud cover) NO windSTART TIME 6:12 PMEND TIME 10:16INITIAL MILEAGE 0END MILEAGE 20.5

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
SYAV	0	28	1	6:13	N S <u>(E)</u> W	FL	GR	
SYAV	0	48	1	6:13	N S <u>(E)</u> W	FL	GR	
LECA	0.25	42	1	6:18	N S <u>(E)</u> W	FU	GR	
SYAV	0.3	67	1	6:19	N S <u>(E)</u> W	FU	GR	
SYAV	0.4	56	1	6:21	N S <u>(E)</u> W	FU	GR	
SYAV	0.45	7	1	6:22	N S <u>(E)</u> W	FU	GR	
SYAV	0.65	0	1	6:25	<u>(N)</u> S E W	FU	GR	
ANAM	1.4	—	20	6:32	N S <u>(E)</u> W	FU	GR	
LETO	1.6	6	1	6:34	<u>(N)</u> S E W	FU	GR	
ANAM	1.8	—	3	6:42	N <u>(S)</u> E W	FU	GR	
LECA	3.6	52	1	6:55	N S <u>(E)</u> W	FU	MX(AC)	
LECA	4.7	0	1	7:07	N S E W	SW	MX(AC)	
LECA	5.1	29	1	7:12	N <u>(S)</u> E W	FL	MX(AC)	
LECA	5.3	50	2	7:15	N <u>(S)</u> E W	FL	MX(AC)	
SYAV	5.75	27	1	7:19	N <u>(S)</u> E W	FL	MX(AC)	
VUVE	6.1	—	1	7:23	N S <u>(E)</u> W	FL	MX(AC)	
LECA	8.9	68	1	7:44	N <u>(S)</u> E W	FL	MX(AC)	
LECA	9.3	70	1	7:48	N <u>(S)</u> E W	FL	MX(AC)	

(18 rows)

Topography codes:

FU flat upland

RG ridgetop

FL flat lowland

SW swale

MS midslope

CR creek drainage

HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland

HU human structure (<30 m)

AC saltbush

YU yucca

MX mixed grassland (MXAC or MXYU)

SGS-LTER Long-Term Monitoring Project
Spotlight Rabbit Count

CIRCLE ONE: (CPER) PNG

DATE (day-month-year) 15.01.04

OBSERVERS LARS, SADI, PAUL, ANNE MARIE

WEATHER 30-35% cloud cover. No wind

START TIME ~~7:52~~ 6:12 PM END TIME 10:16 PM

INITIAL MILEAGE ~~9.9~~ 0 END MILEAGE 20.5

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	9.9	72	1	7:55	N <u>(S)</u> E W	FL	MX(AC)	
LECA	10.3	11	1	8:08	N S <u>(E)</u> W	FL	GR MX	
SYAU	10.8	1	1	8:14	N <u>(S)</u> E W	FL	GR MX	
VUVI	10.9	—	1	—	N S E W	—	—	—
VUVE	11.2	—	1	—	<u>(N)</u> S E W	—	—	—
LECA	12.5	42	1	8:33	N S E <u>(W)</u>	FU	GR	
LECA	12.8	25	2	8:38	N S E <u>(W)</u>	FU	GR	
LECA	12.85	68	2	8:38	N S <u>(E)</u> W	FU	GR	
LECA	13.45	91	2	8:47	N S E <u>(W)</u>	FL	GR	
LECA	13.55	29	1	8:50	N S E <u>(W)</u>	FL	GR	
LECA	14.3	36	2	8:57	<u>(N)</u> S E W	FL	MXAC	
LECA	14.3	49	1	8:58	<u>(N)</u> S E W	FL	MXAC	
LECA	14.65	47	1	9:01	<u>(N)</u> S E W	FL	MXAC	
LECA	14.8	61	1	9:04	<u>(N)</u> S E W	FL	MXAC	
LECA	15.2	79	1	9:07	<u>(N)</u> S E W	FL	MXAC	
SYAU	15.35	55	1	9:10	N S <u>(E)</u> W	FL	MXAC	
LECA	15.4	20	1	9:12	N S <u>(E)</u> W	FL	MXAC	
LECA	15.6	79	1	9:14	N S E <u>(W)</u>	FU	GR	

(18 rows)

Topography codes:

FU flat upland
FL flat lowland
MS midslope
HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded

RG ridgetop
SW swale
CR creek drainage

AC saltbush
YU yucca

Vegetation codes:

GR grassland
HU human structure (<30 m)

MX mixed grassland (MXAC or MXYU)

MX mixed grassland (w/AC or YU)

SGS-LTER Long-Term Monitoring Project Spotlight Rabbit Count

CIRCLE ONE: CPER PNGDATE (day-month-year) 15-01-04OBSERVERS SAFI, PAUL, ANNE MARIEWEATHER 30-35% CLOUD COVER NO WINDSTART TIME 6:12 PM END TIME 10:16 PMINITIAL MILEAGE 0 END MILEAGE 20.5

SPECIES	MILEAGE	DISTANCE	# ANIMALS	TIME	DIRECTION	Topogr	Veg	COMMENTS
LECA	15.75	53	1	9:17	N S <u>E</u> W	FU	GR	
ANAM	17.35	—	1	—	N S <u>E</u> W	—	—	
LECA	17.8	75	1	9:38	N S <u>E</u> W	FU	GR	
SWAU	18.9	70	1	9:51	N S <u>E</u> W	FL	GR	
LECA	19.1	65	1	9:54	N S E <u>W</u>	MS	GR	
LECA	19.45	91	1	10:00	N S E <u>W</u>	FU	GR	
VUNKLE	19.5	78	1	10:05	N S <u>E</u> W	FU	GR	
VUVE	19.5	—	1	10:05	N S E W	—	—	—
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			
					N S E W			

(18 rows)

Topography codes:

FU flat upland RG ridgetop AC saltbush
 FL flat lowland SW swale YU yucca
 MS midslope CR creek drainage MX mixed grassland (MXAC or MXYU)
 HU human structure (<30 m): HUWI windmill, HUBU bldg, HUCG cattle grd, HUNR not recorded
 MX mixed grassland (w/AC or YU)

Vegetation codes:

GR grassland
 HU human structure (<30 m)