Wallkill River National Wildlife Refuge 2002 Vernal Pool Study

Observers:

Kevin Holcomb, Wildlife Biologist Travis Goodie, Biological Intern

Focal Vernal Pools & Percent Vernal Pool Occupied:

Name	UTM (Zone 18)	Survey Dates
Headquarters #1	0536231e 4561643n	4/2, 4/12, 4/24
HQ 1-A	0536162e 4561578n	3/22, 4/2, 4/12, 4/24
HQ 1-B	0536255e 4561607n	3/22, 4/3, 4/12, 4/24
HQ 1-C	0536237e 4561623n	3/22, 4/3, 4/12, 4/24
Judge Beach Rd. #1	0534766e 4561395n	4/4, 4/12, 4/24
JB 1-A	0534745e 4561528n	3/22, 4/4, 4/12, 4/24
JB 1-B	0534769e 4561604n	3/22, 4/4, 4/12, 4/24
Scenic Lakes Rd. (North #1)	0535757e 4559545n	3/27, 4/12, 4/24
Wood Duck Nature Trail #2	0534953e 4558216n	4/3, 4/12, 4/24

Other Notes:

Please call Kevin Holcomb, Wildlife Biologist at (973) 702-7266 or e-mail kevin_holcomb@fws.gov if you have questions.





VERNAL POOL DATA SHEET

New Jersey Division of Fish and Wildlife Endangered and Nongame Species Program

GENERAL INFO

,
SITE NAME/NUMBER: Wood Over Notice Tail #2 OBSERVER: Kevin Halcomb
ORGANIZATION: USFUS DATE: 4/3-4/24 COUNTY: SUSSEX
MUNICIPALITY: Wantage TWP. TOPO QUAD/BLOCK: Hanburg and (8)/Block 3
LANDOWNER: USFUS - WallKill River NWR
DIRECTIONS TO SITE: Souther end of word Duck Nature Trail
DOO! CHARACTERISTICS
POOL CHARACTERISTICS
POO' TYPE (check):natural swale/depressionexcavated pit/ditchimpoundment
WATER LEVEL (check):full >50%f; <50%fulldry
POOL DIMENSIONS (at max capacity): 22 m x 3 m
WATER QUALITY (check):cleartea-coloredalgae-green
STRUCTURE OF VEGETATION WITHIN/OVERHANGING POOL (ESTIMATE % COVER):
25 trees C scrub/shrubfloating vegetationemergent vegetation
DOMINANT PLANT SPECIES WITHIN/CVERHANGING PCO- (optional):
SURROUNDING HABITAT (check all that apply): _upland forest _forested wetlands
emergent/scrub-shrub wetlandagricultural field/grasslandsuburban
GENERAL NOTES/COMMENTS:

	Please check appropriate box				
	STATUS	ADULT	JUVENILE/LARVA	VOCALIZATION	EGG MA
OBLIGATE VERNAL POOL HERPETOFAUNA					
1) spotted salamander (Ambystoma maculatum)	stable				128
2) eastern tiger salamander (Ambystoma t. tigrinum)	endangered				
3) marbled salamander (Ambystoma opacum)	special concern				
4) Jefferson salamander (Ambystoma jeffersonianum)	special concern				
5) blue-spotted salamander (Ambystoma laterale)	endangered				
Jefferson x blue-spotted salamander					
(Ambystoma jeffersonianum x laterale)	no status				
7) wood frog (Rana sylvatica)	stable				116
8) eastern spadefoot toad (Scaphiopus holbrookii)	unknown				
FACULTATIVE VERNAL POOL HERPETOFAUNA		,			
long-tailed salamander (Eurycea I. longicauda)	threatened				
2) red-spotted newt (Notophalmus v. viridescens)	stable				
four-toed salamander (Hemidactylium scutatum)	unknown				
northern spring peeper (Pseudacris crucifer)	stable				
5) New Jersey chorus frog (Pseudacris triseriata kalmii)	unknown				
upland chorus frog (Pseudacris triseriata ferarium)	unknown				
7) northern cricket frog (Acris c. crepitans)	stable				
8) northern gray treefrog (Hyla versicolor)	stable				
9) southern gray treefrog (Hyla chrysoscelis)	endangered				
10) pine barrens treefrog (Hyla andersonii)	threatened		- NO - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
11) american toad (Bufo americanus)	stable				
12) fowlers toad (Bufo woodhousii fowleri)	special concern				
13) green frog (Rana clamitans melanota)	stable	/			
14) builfrog (Rana catesbeiana)	stable				
15) carpenter frog (Rana virgatipes)	speciai concern				
16) pickerel frog (Rana palustris)	stable				1
17) southern leopard frog (Rana utricularia)	stable				
18) spotted turtle (Clemmys guttata)	special concern				
19) wood turtle (Clemmys insculpta)	threatened				
20) eastern painted turtle (Chrysemys p. picta)	stable				
21) eastern mud turtle (Kinosternon subrubrum)	stable	-			
22) corumon snapping turtle (Chelydra serpentina)	staler	1			

VERNAL POOL INVERTEBRATES (Please check appropriate line)

mosquito fairy shrimp caddisfly predaceous diving beetle crawling water beetle water scavenger beetle
whirligig beetle damselfly dragonfly backswimmer water boatman water scorpion giant water bug water strider
fishfly mayfly chironomid midge phantom midge springtail water mites amphipod isopod
clam shrimp ostracod daphnia copepod snail fingernail clam horsehair worm planaria leech
aquatic oligochaete worms

Last Revised: 03/21/02





VERNAL POOL DATA SHEET

New Jersey Division of Fish and Wildlife Endangered and Nongame Species Program

GENERAL INFO

OLIVEIOLE IVI O
SITE NAME/NUMBER: Scenic Lakes (North #1) OBSERVER: Kevin Holcamb
ORGANIZATION: USFUS DATE: 3/27 - 4/24 COUNTY: SUSSEX
MUNICIPALITY: Hardyston Twp. TOPO QUAD/BLOCK: Hanburg and (8) Block 3
LANDOWNER: USFUS - WallKill River NWR
DIRECTIONS TO SITE: Scanic Lakes Ad. Refuge Parking Area #11
Austonimately 50 m North
POOL CHARACTERISTICS
POOL TYPE (check):natural swale/depressionexcavated pit/ditchimpoundment
WATER LEVEL (check):full>50%fulldry
POOL DIMENSIONS (at max capacity): 42 m x 12 m
WATER QUALITY (check):cleartea-coloredalgae-green
STRUCTURE OF VEGETATION WITHIN/OVERHANGING POOL (ESTIMATE % COVER):
10 trees 50 scrub/shrubfloating vegetation 40 emergent vegetation
DOMINANT PLANT SPECIES WITHIN/OVERHANGING POOL (optional):
SURROUNDING HABITAT (check all that apply):upland forestforested wetlands
emergent/scrub-shrub wetlandagricultural field/grasslandsuburban
GENERAL NOTES/COMMENTS:

The same of the sa	Please check appropriate box					
	STATUS	ADULT	JUVENILE/LARVA	VOCALIZATION	EGG MA	
OBLIGATE VERNAL POOL HERPETOFAUNA						
spotted salamander (Ambystoma maculatum)	stable				147	
eastern tiger salamander (Ambystoma t. tigrinum)	endangered					
3) marbled salamander (Ambystoma opacum)	special concern					
4) Jefferson salamander (Ambystoma jeffersonianum)	special concern					
5) blue-spotted salamander (Ambystoma laterale)	endangered					
Jefferson x blue-spotted salamander		1			1	
(Ambystoma jeffersonianum x laterale)	no status					
7) wood frog (Rana sylvatica)	stable				774	
8) eastern spadefoot toad (Scaphiopus holbrookii)	unknown					
			н			
FACULTATIVE VERNAL POOL HERPETOFAUNA						
1) long-tailed salamander (Eurycea I. longicauda)	threatened					
2) red-spotted newt (Notophalmus v. viridescens)	stable			- Annual Public Control		
3) four-toed salamander (Hemidactylium scutatum)	unknown					
4) northern spring peeper (Pseudacris crucifer)	stable					
5) New Jersey chorus frog (Pseudacris triseriata kalmii)	unknown					
6) upland chorus frog (Pseudacris triseriata ferarium)	unknown					
7) northern cricket frog (Acris c. crepitans)	stable					
8) northern gray treefrog (Hyla versicolor)	stable		AND			
9) southern gray treefrog (Hyla chrysoscelis)	endangered					
10) pine barrens treefrog (Hyla andersonii)	threatened					
11) american toad (Bufo americanus)	stable					
12) fowlers toad (Bufo woodhousii fowleri)	special concern				117.5	
13) green frog (Rana clamitans melanota)	stable					
14) bullfrog (Rana catesbelana)	sable	1				
15) carpenter frog (Rana virgatipes)	special Luncern					
16) pickerel frog (Rana palustris)	stable	0.000				
17) southern leopard frog (Rana utricularia)	stable					
18) spotted turtle (Clemmys guttata)	special concern					
(19) wood turtle (Clemmys insculpta)	threatened				-	
20) eastern painted turtle (Chrysemys p. picta)	stable				1	
21) eastern mud turtle (Kinosternon subrubrum)	stable				1	
22) common snapping turtle (Chelydra serpentina)	stable				!	

VERNAL POOL INVERTEBRATES (Please check appropriate line)
mosquitofairy shrimpcaddisfly predaceous diving beetle crawling water beetle water scavenger beetle
whirligig beetle damselfly dragonfly backswimmer water boatman _/ water scorpion giant water bug water strider _/
fishfly mayfly chironomid midge phantom midge springtail water mites amphipod isopod
clam shrimp ostracod daphnia copepod snail _/ fingernail clam horsehair worm planaria leech
aquatic oligochaete worms

Last Revised: 03/21/02





VERNAL POOL DATA SHEET

New Jersey Division of Fish and Wildlife Endangered and Nongame Species Program

GENERAL INFO

SITE NAME/NUMBER: Headquarters #/ OBSERVER: Kevin Hok	mb
ORGANIZATION: USFWS DATE: 4/2 - 4/24 COUNTY: SUS	sex
ORGANIZATION: USFWS DATE: 4/2 - 4/24 COUNTY: SUSS	(8) / Block
LANDOWNER: US FULS - WallKill River NWR	
DIRECTIONS TO SITE: Dognar Dale Nature tra:	
POOL CHARACTERISTICS	
	8
POOL TYPE (check):natural swale/depressionexcavated pit/ditchimpoundment	
WATER LEVEL (check):full>50%full<50%fulldry	
POOL DIMENSIONS (at max capacity): 42 m x 5.4 m	
WATER QUALITY (check):cleartea-coloredalgae-green	
STRUCTURE OF VEGETATION WITHIN/OVERHANGING POOL (ESTIMATE % COVER):	
trees 50 scrub/shrubfloating vegetation 25 emergent vegetation	
DOMINANT PLANT SPECIES WITHIN/OVERHANGING POOL (optional):	
SURROUNDING HABITAT (check all that apply): Xupland forest X forested wetlands	
Xemergent/scrub-shrub wetland	
GENERAL NOTES/COMMENTS:	

	Please check appropriate box				
	STATUS	ADULT	JUVENILE/LARVA	VOCALIZATION	EGG MAS
OBLIGATE VERNAL POOL HERPETOFAUNA					200
spotted salamander (Ambystoma maculatum)	stable				12
2) eastern tiger salamander (Ambystoma t. tigrinum)	endangered				
3) marbled salamander (Ambystoma opacum)	special concern				
4) Jefferson salamander (Ambystoma jeffersonianum)	special concern				
5) blue-spotted salamander (Ambystoma laterale)	endangered				
6) Jefferson x blue-spotted salamander	i real file and a second				
(Ambystoma jeffersonianum x laterale)	no status		B 1		
7) wood frog (Rana sylvatica)	stable				123
8) eastern spadefoot toad (Scaphiopus holbrookii)	unknown			20 GEV W	
			· ·		-
FACULTATIVE VERNAL POOL HERPETOFAUNA					·
long-tailed salamander (Eurycea I. longicauda)	threatened				
2) red-spotted newt (Notophalmus v. viridescens)	stable				
four-toed salamander (Hemidactylium scutatum)	unknown				
4) northern spring peeper (Pseudacris crucifer)	stable				
5) New Jersey chorus frog (Pseudacris triseriata kalmii)	unknown				
b) upland chorus frog (Pseudacris triseriata ferarium)	unknown				Introduction Library
7) northern cricket frog (Acris c. crepitans)	stable		A STATE OF THE STA		
8) northern gray treefrog (Hyla versicolor)	stable				Territoria de Sociales de la composición dela composición de la composición dela composición de la composición de la composición de la com
9) southern gray treefrog (Hyla chrysoscelis)	endangered				
10) pine barrens treefrog (Hyla andersonii)	threatened	BHIRDOSE II			
11) american toad (Bufo americanus)	stable				
12) fowlers toad (Bufo woodhousii fowleri)	special concern	9			
13) green frog (Rana clamitans meianota)	stable				
14) bullfrog (Rana catesbelana)	stable			Annual Harris Tennis - Annual In	
15) carpenter frog (Rana virgatipes)	special concern	18			
16) pickerel frog (Rana palustris)	stable				
17) southern leopard frog (Rana utricularia)	stable	100000000000000000000000000000000000000			
18) spotted turtle (Clemmys guttata)	special concern	-X-2			
19) wood turtle (Clemmys insculpta)	threatened				
20) eastern painted turtle (Chrysemys p. picta)	stable				
21) eastern mud turtle (Kinosternon subrubrum)	stable			Y	
22) common snapping turtle (Chelydra serpentina)	stable				1

VERNAL POOL INVERTEBRATES (Please check appropriate line)

mosquito fairy	y shrimp caddisfly	predaceous diving beetle	crawling water be-	etle water scavenge	r beetle
whirligig beetle _	_ damselfly dragonfly	backswimmer wa	ter boatman water	scorpion giant water	r bug water strider
fishfly mayfly	chironomid midge	phantom midge spri	ngtail water mites _	_ amphipod isopod	1_
clam shrimp	ostracod daphnia	copepod snail fing	gernail clam horseh	air worm planaria _	_ leech
aquatic oligochae	ete worms				a stra

Last Revised: 03/21/02





VERNAL POOL DATA SHEET

New Jersey Division of Fish and Wildlife Endangered and Nongame Species Program

GENERAL INFO
SITE NAME/NUMBER: Judge Beach Ad #1 OBSERVER: Kevin Hokomb
ORGANIZATION: USFWS DATE: 4/4 -4/24 COUNTY: SUSSEX
ORGANIZATION: US FWS DATE: 4/4 -4/24 COUNTY: SUSSEX MUNICIPALITY: Wantage TWP TOPO QUAD/BLOCK: Hamburg Quad (8) / Black 3
LANDOWNER: US FWS - WallKill River NWR
DIRECTIONS TO SITE: Follow Former Faim Ad. Across Rail Road Bed
Proceed Sw along Papakeating Greak.
POOL CHARACTERISTICS
POOL TYPE (check):natural swale/depressionexcavated pit/ditchimpoundment
WATER LEVEL (check):full<50%full<50%fulldry
POOL DIMENSIONS (at max capacity). P.5 m x 9.6 m
WATER QUALITY (check):clearfea-coloredalgae-green
STRUCTURE OF VEGETATION WITHIN/OVERHANGING POOL (ESTIMATE % COVER):
10 trees 25 scrub/shrubfloating vegetationemergent vegetation
DOMINANT PLANT SPECIES WITHIN/OVERHANGING POOL (optional):
SURROUNDING HABITAT (check all that apply):upland forestforested wetlandsemergent/scrub-shrub wetlandagricultural field/grasslandsuburban
GENERAL NOTES/COMMENTS:

	Please check appropriate box					
	STATUS	ADULT	JUVENILE/LARVA	VOCALIZATION	EGG MA	
OBLIGATE VERNAL POOL HERPETOFAUNA				Net read to the second		
1) spotted salamander (Ambystoma maculatum)	stable				114	
2) eastern tiger salamander (Ambystoma t. tigrinum)	endangered				,	
3) marbled salamander (Ambystoma opacum)	special concern					
4) Jefferson salamander (Ambystoma jeffersonianum)	special concern					
5) blue-spotted salamander (Ambystoma laterale)	endangered					
6) Jefferson x blue-spotted salamander						
(Ambystoma jeffersonianum x laterale)	no status					
7) wood frog (Rana sylvatica)	stable				176	
8) eastern spadefoot toad (Scaphiopus holbrookii)	unknown					
FACULTATIVE VERNAL POOL HERPETOFAUNA						
long-tailed salamander (Eurycea I. longicauda)	threatened					
2) red-spotted newt (Notophalmus v. viridescens)	stable					
four-toed salamander (Hemidactylium scutatum)	unknown					
northern spring peeper (Pseudacris crucifer)	stable					
5) New Jersey chorus frog (Pseudacris triseriata kalmii)	unknown					
upland chorus frog (Pseudacris triseriata ferarium)	unknown					
7) northern cricket frog (Acris c. crepitans)	stable					
8) northern gray treefrog (Hyla versicolor)	stable					
9) southern gray treefrog (Hyla chrysoscelis)	endangered					
10) pine barrens treefrog (Hyla andersonii)	threatened					
11) american toad (Bufo americanus)	stable					
12) fowlers toad (Bufo woodhousii fowleri)	special concern					
13) green frog (Rana clamitans melanota)	stable					
11) bullfrog (Rana catesbel? 3)	stable					
15) carpenter frog (Rana virgatipes)	special concern			1557.00		
16) pickerel frog (Rana palustris)	stable					
17) southern leopard frog (Rana utricularia)	stable					
18) spotted turtle (Clemmys guttata)	special concern					
19) wood turtle (Clemmys insculpta)	threatened					
20) eastern painted turtle (Chrysemys p. picta)	stable			Carrier and Carrie		
21) eastern mud turtle (Kinosternon subrubrum)	stable			CONTRACTOR AND INCOME	V 2	
22) common snapping turtle (Chelydra serpenuna)	stab!-					

VERNAL POOL INVENTEBRATES (Please check appropriate line)
mosquitofairy shrimp caddisfly predaceous diving beetle crawling water beetle water scavenger beetle
whirligig beetle damselfly dragonfly backswimmer water boatman water scorpion giant water bug water strider
fishfly mayfly chironomid midge phantom midge springtail water mites amphipod isopod
clam shrimp ostracod daphnia copepod snail fingernail clam horsehair worm planaria leech
aquatic oligochaete worms

Last Revised: 03/21/02

Khristi A Wilkins

03/07/2002 02:22 PM

To: Don Lima/R5/FWS/DOI@FWS, Kate O'Brien/R5/FWS/DOI@FWS, Jeff Haas/R5/FWS/DOI@FWS, Paul Steblein/R5/FWS/DOI@FWS, Michael Horne/R5/FWS/DOI@FWS, Maurice Mills/R5/FWS/DOI@FWS, Paul Hess/R5/FWS/DOI@FWS, Stephanie Koch/R5/FWS/DOI@FWS, Debra Kimbrell-Anderson/R5/FWS/DOI@FWS, Florence James/R5/FWS/DOI@FWS, Deborah Melvin/R5/FWS/DOI@FWS, Sara Williams/R5/FWS/DOI@FWS, Laurie Wunder/R5/FWS/DOI@FWS, Kevin Holcomb/R5/FWS/DOI@FWS, Al Zelley/R5/FWS/DOI@FWS, Michael Langlois/R5/FWS/DOI@FWS, Linda Welch/R5/FWS/DOI@FWS, Ken Sturm/R5/FWS/DOI@FWS, Annabella Larsen/R5/FWS/DOI@FWS, Linda Ziemba/R5/FWS/DOI@FWS, adamsm2@allegheny.edu

CC:

Subject: IMPORTANT - REVISED DATA SHEETS FOR VERNAL POOLS

HI Refuge Biologists:

I made a few changes on the data sheets for the Vernal Pool study. Here are the changes:

- 1) I added ERROR (+/-) in meters for the Location Coordinates. This is the position error of the coordinates from your GPS unit (for example, on the GARMIN GPS III+ receiver, enter the EPE value). Try to get readings with as little error as possible (ideally, error should be < +/- 10 m, but do the best you can). Error is now listed on the "Focal Vernal Pool Location and Habitat Data Sheet" and on the "Percent Vernal Pools Occupied Data Sheet"
- 2) On the "Percent Vernal Pools Occupied Data Sheet" I added several fields:
- a) After the Date, you will notice a field called "# of 50 m sections". This helps you keep track of the FIVE 50 m sections that you are surveying for the 250 m transect ($5 \times 50 \text{ m} = 250 \text{ m}$). We pace out how many steps it takes to do 50 m (for me, 70 paces), so we just count 70 paces 5 times and tally these 5 times on the sheet to keep track of the distance covered.
- a) New Vernal Pool Name or Number you can assign a name or number to each new vernal pool you encounter along the transects
- b) Record the distance along the transect from which you will hike in to the vernal pool (e.g., 120 m) (Distance Along Transect)
 - c) Record the distance to the vernal pool from the transect (Distance from Transect)
- d) Record the bearing/direction from the transect that you head in order to get to the vernal pool (e.g., 200 degrees)

When you do the transects, make sure to take the GPS unit with you to record the coord*nates of vernal pools you find. Also, it might help to use flagging tape to flag the transect and also the way to get to the vernal pools, since you will have to revisit these pools 4 times.

SOME OTHER IMPORTANT NOTES:

- 1) We would also like you to revisit the FOUR FOCAL VERNAL POOLS FOUR TIMES over the course of the study to record SPECIES PRESENCE. Go ahead and use the "PERCENT VERNAL POOLS OCCUPIED DATA SHEET" and just write in the Focal Vernal Pool Name on the data sheet and don't write in anything for the New Vernal Pool Name or Number, Distance along Transect, Distance From Transect, Bearing information.
- 2) If you can not run complete 250 m transects in certain directions (N, S, E, W) because you hit the border of the Refuge, a huge highway, a salt marsh, please write down on the data sheet when the transect has to end (e.g., transect ends at 110 m because salt marsh extends the rest of the transect). Alternatively, if you would like to run complete 250 m transects, you could alter the compass directions of the transects a bit. Just make sure that the transects are at least 45-60 degrees apart to avoid overlap

among the transects in your search area for vernal pools.

Thank you very much! Here are the new data sheets to use for 2002.

Call me at 301.497.5875 or email me at: robin_jung@usgs.gov if you have any questions!

Robin





United States Department of the Interior

USGS PATUXENT WILDLIFE RESEARCH CENTER 12100 BEECH FOREST ROAD LAUREL, MARYLAND 20708-4038

30 January 2002

Dear Refuge, Park and State Biologists Participating in the NE ARMI (Northeast Amphibian Research and Monitoring Initiative) Vernal Pool Study:

Enclosed please find protocols and data sheets for the vernal pool study we will be conducting this year. I changed the protocols a bit from last year to incorporate many of the comments from participants in 2001. The two biggest changes from 2001 are that we are using a double-observer DEPENDENT technique to estimate numbers of egg masses at FOUR vernal pools, and adding a PERCENT VERNAL POOLS OCCUPIED approach around TWO of the focal vernal pools where we conduct egg mass counts.

I will not require additional training for those Refuges and Parks who participated last year, unless entirely different personnel will be conducting the surveys. For the NEW REFUGES and PARKS participating in 2002, I am requiring that at least one person who will be conducting the surveys attend a 1.5 day training session at the Patuxent Research Refuge sometime in early-mid March (dates to be determined based on weather and availability of personnel). USGS will pay for the travel costs to this training session, as well as provide funds to help defray personnel costs in carrying out the project (approximately \$1,000-\$1,500 per Refuge). I will also supply you with equipment that you need.

I greatly appreciate your interest and help in working on this project. Please contact me as soon as possible if you can participate in the vernal pool surveys. Once I hear from all of you, I will work with Jan Taylor on getting funds distributed and equipment ready.

I look forward to working with you. Let's hope for a wonderful spring and a good vernal pool amphibian breeding season!!

Sincerely,

Robin E. Jung, Ph.D.

USGS Patuxent Wildlife Research Center

12100 Beech Forest Rd.

Laurel, MD 20708

301.497.5875

301.497.5784 (FAX)

robin jung@usgs.gov

Totals are Surmarized on the inside front cover of each folder, hand-written an sticky notes,

Spotter Scl. Wood Frog

2

23

Egg Masses 4/12/02 Spotter Sal.

1

Ess Masses Spotler Sel. 4/24/00

FOCAL VERNAL POOL LOCATION AND HABITAT DATA SHEET

LOCALITY: WallK:11 Piver NWR VERNAL POOL NAME: Headquarters #1
OBSERVER: K. Hokomb / T. Goodie DATE: March 22, 2002
DETAILED DIRECTIONS TO SITE:
Behind Refuge HQ (Rt 565) off Dagmar Dale Nature Trail
UTM ZONE: 8 UTM DATUM: NAD 83 UTM E: 0536231 UTM N: 4561643 ERROR: +/-9.6 m
LATITUDE (DDMMSS.SS): 4/12.320' LONGITUDE: 24°34.069' ELEVATION: 124 Mm ft
POOL MAX. LENGTH: 42 m POOL MAX. WIDTH: 5,4 m POOL MAX. DEPTH: 83 cm
POOL PERMANENCY: temporary (dries annually) semipermanent (sometimes dries) permanent (never dries)
POND TYPE (Check either Natural, Beaver-created, Artificial/Man-made, or Unknown):
☐ Natural (e.g., oxbow, vernal pool)
☐ Beaver-created
Artificial/Man-Made - If pool is artificial/man-made, pick best description below:
borrow/gravel pit □ roadside ditch□ farm pond □ impoundment□ other:
☐ Unknown
SITE TYPE: upland-isolated (not part of larger wetland)
bottomland-isolated (part of a river or lake floodplain)
wetland complex (associated with a larger wetland complex)
FISH PRESENT: Yo Yes If Yes, list Species:
DISTANCE TO FOREST FROM WATER'S EDGE:
DISTANCE TO NEAREST ROAD:
ROAD IS: PAVED GRAVEL DIRT
ROAD CONDITIONS AT NIGHT: ☐ Light Traffic (< 10 cars) ☐ Heavy Traffic (≥ 10 cars)
FOR THE FOLLOWING, RANK the amount of pond area in which each type occurs (does not need to sum to 100%): $0=0\%$, $1=1-10\%$, $2=11-25\%$, $3=26-50\%$, $4=51-75\%$, $5=76-100\%$
AQUATIC SUBSTRATE: Leaf Litter 2 Sticks/Logs 3
AQUATIC VEGETATION: SAV Herb Emergent _2 Cattail Shrub _3 _ Tree Other

LAND USE/COVER AROUND VERNAL POOL:	
Estimate % of each of the land use/cover categories within 50 m of poor	ol. Estimates should total 100%:
50% Woodland/Forest	
Hardwood (> 75% deciduous)	
Softwood (> 75% evergreen)	15. 1
Mixed Hardwood/Softwood (< 75% each)	
If % woodland/forest is entered, record if canopy cover over the	ne vernal pool is heavy or moderate:
☐ Heavy (> 50% canopy cover of trees/shrubs > 6 ft. tall)	
Moderate (< 50% canopy cover of trees/shrubs < 6 ft. tall)	
24 % Agriculture/Fields	
25 % Meadow/Marsh	
% Residential/Urban/Suburban	
% Industrial	
% Mining	
% Pasture/Rangeland	
% Road	
1 % Other: Dogmar Dake Nature Trail Cold Falm	Rd-grave)
NOTES:	
See Photos	
Possible drain pipe at North end	
cleared Multi-flora rose + shrubs from around	al ford
WOFR Calling 3/21/02	

	F	OCAL VE	RNAL I	POOL I	EGG MAS	SS COUN	T DATA	SHEET	
			000	(B)	Rock			RNWR	
				5			1 32453100	NAL POOL NAI	ME:
			•	3	LMFR		DATE	: 4/2/00 BEGIN: 1/0	
				9			1	END: 143	
				0			INDIC	SPACING IS _ CATE NORT	H ON MAP
		gw *						Holcomb	
	M. A	6						ERVER 2	
					@		* INI	DICATE WITH N OBSERVERS	
Species	# Eg OBS 1	g Masses OBS 2	Dead		Species	# Egg N OBS 1	Masses OBS 2	Dead	
0 W	_L								
(3) Z			_						
© _W	<u>\</u>	- <u>-</u>							
@W									
@_W @_W	13			_					
@ W									
@ <u>ω</u> @ ω	***************************************			-					
	-				7				

LOCALITY: _	WRNWR	,	VE	RNAL POOI	L NAME:	Ha #1	
Date: 4/2	102	_ Sky Code: _	2 W	ind Code:	Previou	s Day Precipitati	on? YES NO
Air Temp.:5	3 52.5	Water Temp	45.5	46°	□ ℃ ☑	°F	
			-			L M FULL] < 1/4 DRY
	aired During Eg				•	/	
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
Unk.					30		
	_	-			-	1	
					-	 	
						<u> </u>	
						-	
						-	
						1	
NOTES:							
							4
CHORUS CODE	DESCRIPTION	Water to the second			•		
0	No amphibians call				-6:-4:-4:-1W		
2	Calls overlan (simu	counted, calls not ov litaneous calling) by	reriapping. Re	cord the number	le. Record the number	r of individuals calli	by hyphen (e.g., 1 - 3)
	separated by hyphe	n (e.g., 2 - 6)				morriduais cam	ng arter code
3	Full chorus, calls co	ontinuous and overla	apping. Can no	ot distinguish inc	dividuals.		

FOCAL VERNAL POOL EGG MASS COUNT DATA SHEET

		ro	CAL VER	NAL FUUL	EGG MAS	S COUNT	DAIAS	ILLLI	1
							VERNA	L POOL NAME	
							DATE:	4/12/20	
							GRID S INDICA	SPACING IS	ON MAP
			X ASS	(b)					
				**					
	_				JW)		* INDI	CATE WITH LI	
Species	s	# Egg I OBS 1	Masses OBS 2	Dead	Species	# Egg M OBS 1	asses OBS 2	Dead	
7								47	
71-									
					-	Ţ.			
			3	-					
				-		-			
		-							
	A A								
				-	-				
	2	Species S	Species #Egg 1 OBS 1	Species #Egg Masses OBS 1 OBS 2	Species #Egg Masses OBS 1 OBS 2	Species #Egg Masses OBS 1 OBS 2 Species OBS 1 OBS 2	Species # Egg Masses OBS 1 OBS 2 Dead Species # Egg M OBS 1	DATE: TIME B TIME B GRID S INDICA OBSE W. OBSE OBS 1 OBS 2 Dead Species # Egg Masses OBS 1 OBS 2	TIME END:

LOCALITY:	wallkill	River N	IWR VEI	RNAL POO	L NAME:	HQ#1	
Date: 4//	2/2002	_ Sky Code: _	5 W	/ind Code:	Previou	s Day Precipitati	on?
Air Temp.: <u>51</u>		_ Water Temp	: 480 #		□ °c 🗹	°F	
Pool Max. Dept	th: <u>73</u>	m Water Le	vel: FL	JLL 🗆 ¾ F	ULL 1/2 FUL	L N FULL] < 1/4 [] DRY
Is Visibility Imp	paired During Egg	g Mass Counts?	YES	□ NO			
OTHER AMP	HIBIANS, REP	TILES, INVER	RTEBRATE	S, ETC.:			
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
GRFR							1
			-	-	-	-	
						-	
			-			-	
	_						
NOTES:		11-00-00				***************************************	
						9	
CHORUS CODE							
0	No amphibians call		verlanning Pa	cord the number	of individuals calling	g after code senarate	i by hyphen (e.g., 1 - 3)
2	Calls overlap (simu	Itaneous calling), b	ut individuals a	re distinguishab	le. Record the number	r of individuals callin	ng after code
	separated by hypher	n (e.g., 2 - 6)				The second secon	Conconstruction
3	Full chorus, calls co	intinuous and overl	apping. Can no	ot distinguish in	dividuals.		

FOCAL VERNAL POOL EGG MASS COUNT DATA SHEET

						LOCA	LITY:	
						W	RNWR	
						VERN	AL POOL NAM	1E:
						- Ha	#/	
				1			4/24/08	
-			+			4	BEGIN: _/3	
							END: 13	
						GRID	SPACING IS 5	.25 m
-				0			ERVER 1	4
						OBSI	ERVER 2	
-	-	-				T.	Goodie	
				JW			ICATE WITH	
Species	# Egg N OBS 1	Masses OBS 2	Dead	Species	# Egg N OBS 1	lasses OBS 2	Dead	
	1							
	*						-	
		-		· · · · · · · · · · · · · · · · · · ·		***	-	
			-	-	-		-	

		***************************************	1-1-1	-				
			-					
			2000	e 				

LOCALITY:	WRNE	NR	VEI	RNAL POO	L NAME:	HQ#1	
Date: 4/6	24/02	_ Sky Code:	0 W	ind Code: _	/ Previou	s Day Precipitati	on? TYES TY
Air Temp.: 6	OF	Water Tem	D.: 53°	<i>F</i>		°F	
Pool Max. Dept	h: 76	cm Water L	evel: TO FL	ILL 🗆 ¾ F	ULL 1/2 FULI	L M FULL C	1 <¼ □ DRY
	paired During Eg						
	HIBIANS, REP						
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores		Tadpoles/ Larvae	# Juveniles	# Adults
			4			1	+
		-			-		
		 			-	1	
			-				-
		 	+		+		+
			-		-		-
		<u> </u>	-		_		-
		-					
				1			
						<u> </u>	
NOTES:							
						140	
CHORUS CODE				esining state			
0	No amphibians cal						
1	Individuals can be	counted, calls not	overlapping. Re	cord the numbe	r of individuals callin	g after code separate	d by hyphen (e.g., 1 - 3)
2	separated by hyphe		out individuals	are distinguishat	ole. Record the number	er or individuals calli	ng after code
1	Full chorus calls o		rlanning Can n	ot distinguish in	dividuals		

. .

LOCALITY: Wo	1111:11	River 1	UNR 1	FOCAL VER	NAL POOL NA	ME: Hea	Lquarters	#/
OBSERVER: K.	Hokom	16 / T. C	Foode 1	DATE:	3/22/02	1	# of 50 m section	s:
TRANSECT: N	SEC	NEW V	ERNAL PO	OOL NAME O	R NUMBER:	HQ	1-A	
DISTANCE ALONG	TRANSE	CT: 100 1	m DISTAN	NCE FROM T	RANSECT:	24 m BE	ARING: 220	·Su
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E: ∠	2536/6	2_UTM N:	4561578	ERROR:	+/-m
LATITUDE (DDMM	(SS.SS):	1	LONGIT	TUDE:	E	LEVATION: _	126	n□ ft
POOL MAX. LENG	TH:	2 m P	OOL MAX	. WIDTH:	3_ m	POOL MAX. I	рертн: <u>48</u>	em_
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores		Tadpoles/ Larvae	# Juveniles	# Adults	
							-	
	<u> </u>							
LOCALITY: _ (L)	RNU	IR		FOCAL VER	NAL POOL NA	ME: He	ead alto	/s # /
OBSERVER: K.	Holom	6/1.60	ale 1	DATE:	3/22/02	#	of 50 m sections	S 4/
TRANSECT: N	S (E) V	V NEW V	ERNAL PO	OOL NAME O	R NUMBER:	Ha	-1-B	
DISTANCE ALONG	-					SE PERSON		
UTM ZONE: 18								
LATITUDE (DDMM							115 g n	
POOL MAX. LENG	TH:	2 m P	OOL MAX	. WIDTH:			921	cm
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	

LOCALITY: _ W	a//K1	A.ver	ruk :	FOCAL VER	NAL POOL NA	ME: Hea	Squattos	#1
OBSERVER: K.	Holcome	/T. 600	die 1	DATE:	3/22/08	2	# of 50 m section	ıs:
TRANSECT: N								
DISTANCE ALONG	TRANSE	CT: <u>/0</u>	m DISTAN	NCE FROM	TRANSECT: _	O m BE.	ARING: 90	· E
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E: <u>c</u>	25362	37_UTM N:	456/623	ERROR:	+/-m
LATITUDE (DDMM	(SS.SS):		LONGIT	UDE:	E	LEVATION:	124 0	n□ ft
POOL MAX. LENG	TH:	m P	OOL MAX	. width: _	m	POOL MAX. I	DEPTH: <u>6</u>	em
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
	-						ļ	-
							 	1
					-			
]
LOCALITY:			1	FOCAL VER	RNAL POOL NA	ME:		
OBSERVER:			1	DATE:			of 50 m section	s:
TRANSECT: N	S E V	NEW V	ERNAL PO	OL NAME	OR NUMBER:			
DISTANCE ALONG	TRANSE	CT:	m DISTAN	NCE FROM	TRANSECT: _	m BE.	ARING:	_ •
UTM ZONE:	UTM DAT	UM: NAD 83	UTM E: _		UTM N:		ERROR:	+/-m
LATITUDE (DDMM	(SS.SS):		LONGIT	'UDE:	E	LEVATION: _	n	n□ ft
POOL MAX. LENG	тн:	m Pe	OOL MAX	. width: _	m	POOL MAX. I	DEPTH:	cm
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
							 	-
								1
		j.						
					-	 		

DISTANCE ALC	ONG TRANSE	CT: /00	m DISTA	NCE FROM	TRANSECT: _	24 m BE	ARING: 220
JTM ZONE: /	& UTM DAT	TUM: NAD 8	3 UTM E: <u>∠</u>	25 36/6	2 utm n:	4561578	ERROR:
ATITUDE (DD	MMSS.SS): _		_ LONGIT	UDE:	1	ELEVATION:	126 V m
POOL MAX. LE	NGTH:	2 m 1	POOL MAX	. WIDTH: _	3m	POOL MAX.	DEPTH: <u>48</u>
PECIES	Chorus Code	# Mated Pairs		# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
WOFR							3
			-				
	_		-		-		
	_		-		-		
			1				
OCALITY: /	. J. 114.11	P: 105	411.10	EOCAL VEI	PNAL BOOL N	ANT. 4	
BSERVER:	k. Holaemb	/ Te Ger	odie 1	DATE:	1/3/2002	# o	Squarters f 50 m sections:
DBSERVER:	K. Holaemb N s E	V / Te Got W NEW V	OS.'E I	OL NAME (// <i>3/2co2</i> OR NUMBER:	#0 #0 1	f 50 m sections:
DBSERVER: _A	N S E	/ <i>J. Gor</i> W NEW V	rernal po m distan	OATE:	OR NUMBER: _TRANSECT: _	#0. #0 / 25 m BE	f 50 m sections:
DBSERVER: _A TRANSECT: I DISTANCE ALC UTM ZONE: /	N S E O ONG TRANSE	W NEW V CCT: O	VERNAL PO m DISTAN 3 UTM E: C	DATE: OL NAME (NCE FROM 253625	OR NUMBER: TRANSECT: UTM N:	#0. #0. 1 25 m BE 4561607	f 50 m sections:
DBSERVER: _/CRANSECT: INTERPOLATION CONTROL	N S E ON TRANSPORT UTM DATE MMSS.SS):	W NEW V CCT: O	VERNAL PO m DISTAN 3 UTM E: C	OATE: OL NAME (NCE FROM 253625 UDE:	OR NUMBER: TRANSECT: UTM N:	#01 25 m BE 4561607 ELEVATION:	f 50 m sections:
DBSERVER: _ATITUDE (DD	N S E ON TRANSPORT UTM DATE MMSS.SS):	W NEW V CCT: O	VERNAL PO m DISTAN 3 UTM E: C	OATE: OL NAME ONCE FROM 253625 TUDE: WIDTH: _	OR NUMBER: TRANSECT: UTM N:	#01 25 m BE 4561607 ELEVATION:	f 50 m sections:
DBSERVER:ACRANSECT: INTERPOLATION CONTROL (DD.) COOL MAX. LE	N S E ON TRANSE ONG TRANSE OMMSS.SS):	W NEW V CCT: O TUM: NAD 8.	VERNAL PO m DISTAN 3 UTM E: C LONGIT POOL MAX	OATE: OL NAME ONCE FROM 253625 TUDE: WIDTH: _	OR NUMBER: TRANSECT: SUTM N: I I I Tadpoles/	# 0. # 0.	f 50 m sections:
DBSERVER: _A FRANSECT: I DISTANCE ALC UTM ZONE: /	N S E ON TRANSE ONG TRANSE OMMSS.SS):	W NEW V CCT: O TUM: NAD 8.	VERNAL PO m DISTAN 3 UTM E: C LONGIT POOL MAX	OATE: OL NAME ONCE FROM 253625 TUDE: WIDTH: _	OR NUMBER: TRANSECT: SUTM N: I I I Tadpoles/	# 0. # 0.	f 50 m sections:

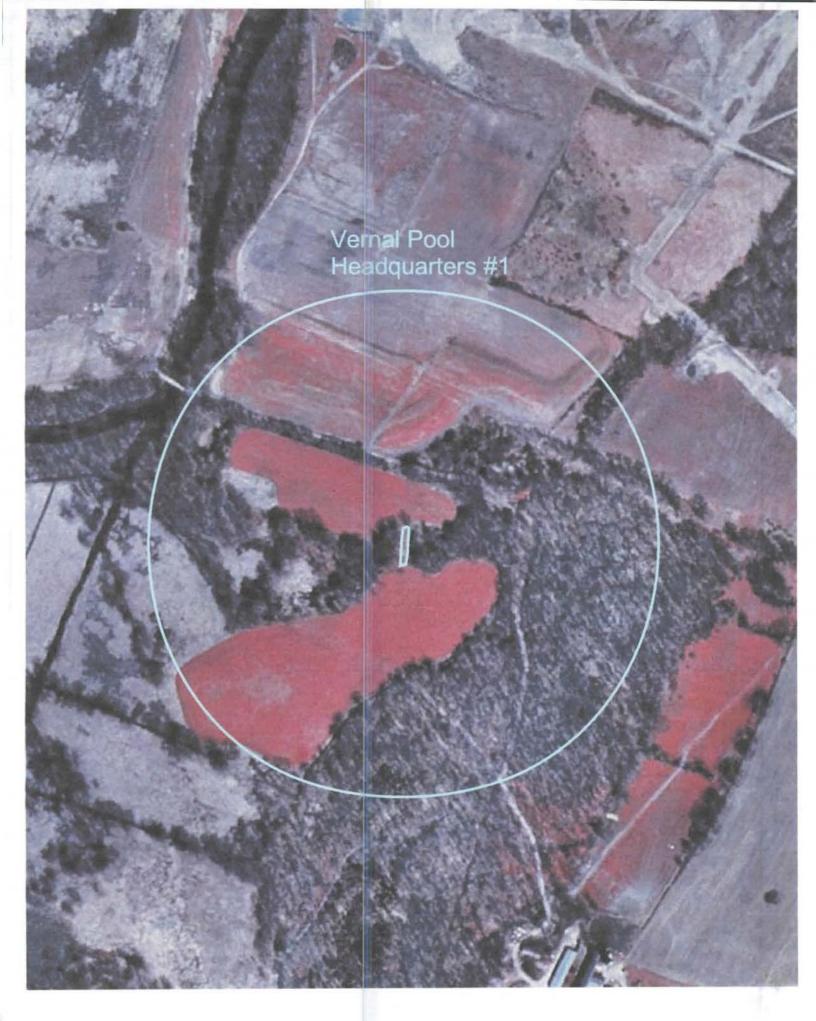
LOCALITY: مطنا	1K:11 K	iver Nu	IR	FOCAL VER	NAL POOL NA	ME: Head	laur tes	#/
OBSERVER: K.	Holcome	17.6	odie 1	DATE:	13/2002	. # c	of 50 m sections:	
TRANSECT: N								
DISTANCE ALONG	TRANSE	CT: <u>//</u> _1	n DISTAI	NCE FROM T	TRANSECT: _	O m BE	ARING: 90	ع ۰ ر
UTM ZONE: <u>/8</u>	UTM DAT	UM: NAD 83	UTM E: <u>८</u>	253623	2_ UTM N:	456162	3 ERROR: _	+/-1
LATITUDE (DDMM								
POOL MAX. LENG	тн:	m PC	OOL MAX	. WIDTH:	m	POOL MAX. I	оертн: <u>6</u>	cı
SPECIES	Chorus Code			# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
								-
					-			1
								-
LOCALITY:			1	FOCAL VER	NAL POOL NA	ME:		
OBSERVER:								
TRANSECT: N								
DISTANCE ALONG	TRANSE	CT:1	n DISTA!	NCE FROM T	TRANSECT: _	m BE	ARING:	· _
UTM ZONE:	UTM DAT	UM: NAD 83	UTM E: _		UTM N:		_ ERROR:	+/-r
LATITUDE (DDMM	(SS.SS):		LONGIT	UDE:	E	LEVATION: _		m□ ft
POOL MAX. LENG	ТН:	m PC	OOL MAX	. WIDTH:	m	POOL MAX. I	DEPTH:	cı
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
								-
								-
							 	4

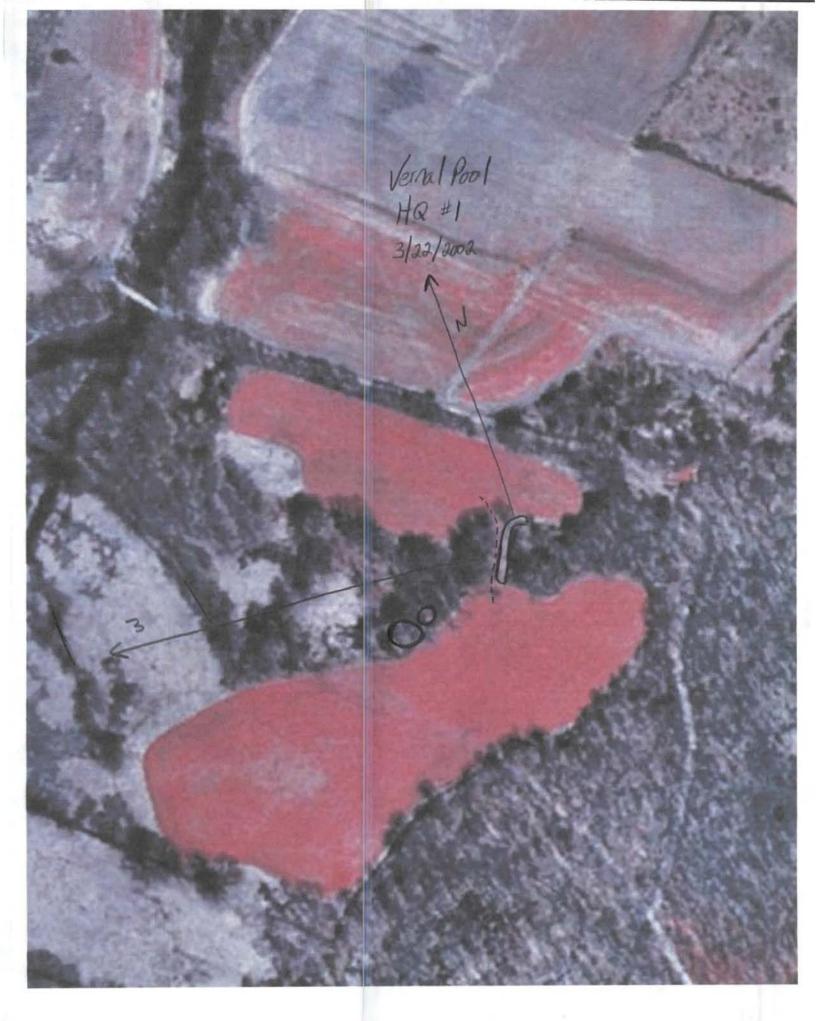
LOCALITY: Wa	11/11	River NO	NR	FOCAL VER	RNAL POOL N	AME: Hea	Squeste	5#1
OBSERVER: K.	Hokomb	/T. 600	die	DATE:	4/12/	2002	# of 50 m section	ns:
TRANSECT: N	S E (NEW V	ERNAL PO	OOL NAME	OR NUMBER:	Ha	1-A	
DISTANCE ALONG								
UTM ZONE: 18								
LATITUDE (DDMN								
POOL MAX. LENG								
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg	Tadpoles/ Larvae			
							-	
						-	-	
								-
LOCALITY: 44	. 11111	River	Nhall	FOCAL VER	NAL POOL N	AME: A	Jala moters	#/
OBSERVER: K.	Holom	6 / 7. 6	mole 1	DATE:	4/12/2	002 #	of 50 m section	s:
TRANSECT: N	S (E)	W NEW V	ERNAL PO	OOL NAME (OR NUMBER:	Ha	1-8	
DISTANCE ALONG								
UTM ZONE: _/8							1.50	
LATITUDE (DDMM								
POOL MAX. LENG								-
SPECIES	Chorus	# Mated	Sperma-	# Egg	Tadpoles/	# Juveniles	# Adults	1
	Code	Pairs	tophores	Masses	Larvae			
				100				

OBSERVER: K TRANSECT: N	111:11	River	UWR 1	FOCAL VER	NAL POOL NA	ME: Head	Squartes	#/
OBSERVER: K	Holco	mb / T. G	sole 1	DATE:	4/12/0	82 #	of 50 m sections	s:
TRANSECT: N	s E v	V NEW V	ERNAL PO	OL NAME (OR NUMBER: _	Ha	1-0	
DISTANCE ALONG								
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E: <u>c</u>	25362	32 UTM N:	4561623	ERROR:	_ +/-m
LATITUDE (DDMM	SS.SS):		LONGIT	'UDE:	E	LEVATION: _	124 Bn	□ ft
POOL MAX. LENG	тн:	/ m P	OOL MAX	. WIDTH: _	m	POOL MAX. D	ЕРТН:	en
SPECIES	Chorus Code	# Mated Pairs			Tadpoles/ Larvae	# Juveniles	# Adults	
			-					
LOCALITY:				FOCAL VER	RNAL POOL NA	ME:	- I	
OBSERVER:								
TRANSECT: N								
DISTANCE ALONG								
UTM ZONE:	UTM DAT	UM: NAD 83	UTM E: _		UTM N:		_ERROR:	+/-n
LATITUDE (DDMM	(SS.SS):		LONGIT	UDE:	E	LEVATION: _	n	ı 🗆 ft
POOL MAX. LENG	тн:	m P	OOL MAX	. width: _	m	POOL MAX. D	EPTH:	cn
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
in the second second			-			-		

LOCALITY: W	11/4/11	River 1	VWR I	FOCAL VERN	NAL POOL NA	ME: Head	guertes	#/
OBSERVER: /	Holame	1. 600	de 1	DATE:	4/24/02	#	of 50 m section	s:
TRANSECT: N	S E &	NEW VI	ERNAL PO	OL NAME O	R NUMBER: _	Ha	1-A	
DISTANCE ALONG								
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E: _	05 3610	52 UTM N:	4561578	ERROR:	+/-m
LATITUDE (DDMM	SS.SS):		LONGIT	UDE:	EI	LEVATION: _	126 8 11	n□ ft
POOL MAX. LENGT	гн:/	1/2 m PC	OOL MAX.	. WIDTH:	21/2 m	POOL MAX. D	EPTH: <u>40</u>	em
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores		Tadpoles/ Larvae	# Juveniles	# Adults	
							777	
LOCALITY: LAJA	114:11	Riber	AJUR	FOCAL VER	NAL POOL NA	ME: Her	Luciter	#/
OBSERVER: //	Holom	16 IT	fortle 1	DATE:	4/20/02	#	of 50 m sections	/
TRANSECT: N	S AS V	V NEW VI	ERNAL PO	OOL NAME O	R NUMBER:	Ho	1-8	
DISTANCE ALONG								° Se
UTM ZONE: 18								
LATITUDE (DDMM								
POOL MAX. LENG	гн:	11/2 m PC	OOL MAX.	. WIDTH:	m	POOL MAX. D	EРТН: <u>6</u>	cm
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	

LOCALITY: _ W	OIK-11	River	NWR I	FOCAL VERN	AL POOL NA	ME: Hac	Lautes	#/
OBSERVER: K	Holcom	6/7.0	ude 1	DATE:	1/24/02		of 50 m section	ns:
TRANSECT: N	S E V	NEW VE	RNAL PO	OL NAME O	R NUMBER: _	Ha	1-0	
DISTANCE ALONG	TRANSE	CT: <u>/O</u> n	n DISTAN	NCE FROM T	RANSECT:	m BEA	RING: _90	<u>≥</u> . <u>e</u>
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E: _	05-3623	2 _ UTM N: _	4561623	ERROR: _	+/-m
LATITUDE (DDMM	SS.SS):		LONGIT	UDE:	EI	LEVATION: _	124 8	m□ ft
POOL MAX. LENGTH: m POOL MAX. WIDTH: m POOL MAX. DEPTH: cm								
SPECIES	Chorus Code			# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
						****		-
						1		1
								-
LOCALITY:			1	FOCAL VERN	NAL POOL NA	ME:	<u> </u>	_
OBSERVER:								
TRANSECT: N								
DISTANCE ALONG								
UTM ZONE:								
LATITUDE (DDMM								
POOL MAX. LENG								
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
								-
				11.00				
								-





Wallkill River NWR - Tract #22 4/20/2001 Vernal Pool Scenic Lakes Rd - North



Wallkill River NWR - Tract #22 5/9/2001 Vernal Pool Scenic Lakes Rd - North



Wallkill River NWR - Tract #22 5/9/2001 Vernal Pool Scenic Lakes Rd - South



Wallkill River NWR - Tract #22 5/9/2001 Vernal Pool Scenic Lakes Rd - South



Wallkill River NWR - Tract #22 5/9/2001 Vernal Pool Scenic Lakes Rd - South



4/3/02 Egg Masses

Spotter Salamander | Wood Frog

8

4/12/02 Egg Masses
Spotter Salamander Wood Frog

28

4/24/02 Spotter Salamander

23

FOCAL VERNAL POOL LOCATION AND HABITAT DATA SHEET

LOCALITY: Wallkill River NWR VERNAL POOL NAME: WOOL BOCK Nature Trail #2
OBSERVER: K. Holcomb / T. Goodie DATE: 4/3/2002
DETAILED DIRECTIONS TO SITE:
End of wood Duck Notuse Trail (East side)
UTM ZONE: 18 UTM DATUM: NAD 83 UTM E: 0534953 UTM N: 4558216 ERROR: +/- 10 m
LATITUDE (DDMMSS.SS): LONGITUDE: ELEVATION: 132 m ft
POOL MAX. LENGTH: 22 m POOL MAX. WIDTH: 3 m POOL MAX. DEPTH: 19 cm
POOL PERMANENCY: temporary (dries annually) semipermanent (sometimes dries) permanent (never dries)
POND TYPE (Check either Natural, Beaver-created, Artificial/Man-made, or Unknown):
☐ Natural (e.g., oxbow, vernal pool)
☐ Beaver-created
Artificial/Man-Made - If pool is artificial/man-made, pick best description below:
borrow/gravel pit roadside ditch farm pond impoundment other: 5: Le of Rail-road over as Nature Trail
Unknown Used as Natule Tlair
SITE TYPE: upland-isolated (not part of larger wetland)
bottomland-isolated (part of a river or lake floodplain)
wetland complex (associated with a larger wetland complex)
FISH PRESENT: No Yes If Yes, list Species:
DISTANCE TO FOREST FROM WATER'S EDGE: ft ft
DISTANCE TO NEAREST ROAD: 4/5 m ft At. 23
ROAD IS: PAVED GRAVEL DIRT
ROAD CONDITIONS AT NIGHT: ☐ Light Traffic (< 10 cars) ☐ Heavy Traffic (≥ 10 cars)
FOR THE FOLLOWING, RANK the amount of pond area in which each type occurs (does not need to sum to 100%): $0=0\%, 1=1-10\%, 2=11-25\%, 3=26-50\%, 4=51-75\%, 5=76-100\%$
AQUATIC SUBSTRATE: Leaf Litter 5 Sticks/Logs 3
AQUATIC VEGETATION: SAV Herb Emergent Cattail Shrub _/ Tree _2 Other

LAND USE/COVER AROUND VERNAL POOL: Estimate % of each of the land use/cover categor	ies within 50 m of pool. Estimates should total 100%:
20 % Woodland/Forest	
Hardwood (> 75% deciduous)	
☐ Softwood (> 75% evergreen)	
☐ Mixed Hardwood/Softwood (< 75% each)	
If % woodland/forest is entered, reco	ord if canopy cover over the vernal pool is heavy or moderate:
Heavy (> 50% canopy cover of trees	/shrubs > 6 ft. tall)
Moderate (< 50% canopy cover of tre	ees/shrubs < 6 ft. tall)
9 % Agriculture/Fields	· · · · · · · · · · · · · · · · · · ·
20 % Meadow/Marsh	()
% Residential/Urban/Suburban	
% Industrial	· ·
% Mining	Y ,
% Pasture/Rangeland	
% Road % Other:	vood Dek Neture Tru:1)
NOTES:	
The state of the s	
(MATERIAL PROPERTY OF THE PROP	

				2		LOCALITY:
		₹				WRNWR
		1				VERNAL POOL NAME:
	-	1 =		#		
		1	,			DATE: 4/3/02
		1				
				8		TIME BEGIN: 10 55
-			0 ⁰ 5	6		TIME END: //30
		88	9 0			GRID SPACING IS 2.5 m INDICATE NORTH ON MAP
			20	-		OBSERVER 1
		*	6	8		Holamb
			* 17			OBSERVER 2
		\perp	A //			- Gindie
		1	W			* INDICATE WITH LINE
		(A)		V		WHEN OBSERVERS SWITCH
Species	# Egg N OBS 1	OBS 2	Dead	Species	# Egg N OBS 1	Masses Dead OBS 2
0 5						
@ W		-	-		-	
O W					· <u>· · · · · · · · · · · · · · · · · · </u>	
O S	2.	2				
S S	1					
	14		3			
7 S	1			-		
® <u>S</u>	1					**************************************
95	1 5		-			
(B) 5	da	1	-			
					3	· · · · · · · · · · · · · · · · · · ·
			-	(23	
				Section 19		

	11/11/11	0			Let	1-1-	40
LOCALITY:	WANWA	<u> </u>	VE	RNAL POO	L NAME: <u>Woo</u>	Duck 1/	on? YES NO
Date:	3/02	_ Sky Code:	v	/ind Code: _	Previou	s Day Precipitati	on? YES NO
Air Temp.: 7	2.15	_ Water Tem	p.: 58.6	<u> </u>	□ °C 🗹	F	
Pool Max. Dept	th: <u>/9</u>	cm Water L	evel: T	JLL 🗆 ¾ F	ULL 🗆 ½ FULI	FULL C] < 1/4 [] DRY
Is Visibility Imp	paired During Eg	g Mass Counts	? DYES	1 NO			
	HIBIANS, REP						
SPECIES	Chorus	# Mated	Sperma-	# Egg	Tadpoles/	# Juveniles	# Adults
	Code	Pairs	tophores		Larvae		
WOFR							2
GRFR							2
					-	-	-
			1			1	
		-	-			-	
	1					1	
		1				1	
NOTES:							
NOTES.							
						*	1
0 CHORUS CODE	DESCRIPTION No amphibians call	ing			N. Mills		
1	Individuals can be	counted, calls not	overlapping. Re	cord the number	of individuals calling	g after code separated	by hyphen (e.g., 1 - 3)
2	Calls overlap (simu	Itaneous calling),	but individuals a	re distinguishab	le. Record the number	r of individuals calling	ng after code
2	separated by hyphe Full chorus, calls co	n (e.g., 2 - 6)	rlanning Can a	at distinguish in	dividuals		
3	i un chorus, cans co	outilitions and over	napping. Call no	or aistrugutsu in	uitiduais.		1

	10	CAL VER	TAL TOOL	LEGG MAS	S COUNT	DAIAS	HEEL	
							LITY:	
-		1				uhl	Kill Rive	1 MUR
				λ		120000000000000000000000000000000000000	AL POOL NAM	
-		1	X	m -		- Was	Dek Not	WE Tray A
		Ø				DATE	4/12/2	002
-		+		1			BEGIN:0900	
				8		TIME	END: 0935	5
			9	8		GRID	SPACING IS 2	,75 m
			(9)	1			ERVER 1	
			9			1	Holamb	
			39 6				ERVER 2	
-	-		1			- T.	Goodie	
			de	7			ICATE WITH I	
pecies	# Egg I	Masses OBS 2	Dead	Species	# Egg M OBS 1	lasses OBS 2	Dead	
5_	_5_	-	***********************	-				
N				-				
5	5							
W		-		-		P line mark to the S		
S	1							
W	13 -	Hatching	Marie de la constante de la co					
5	1		•				7074 P.R.	
5	16							
5	1		, 12 - 12 - 12 - 1		-			
_					-			
				-		-		
			/////////////////////////////////////					
			Electrical Inc.		4			

LOCALITY:	WIIK:11 R	iver NWI	Q VE	RNAL POO	L NAME: Woo	d Duck No	tur trail #2
Date: 4/14	102	Sky Code:	_2_ v	/ind Code: _	2_ Previou	s Day Precipitat	on? YES
Pool Max. Depth	:_16,1	cm Water L	evel: 🔲 FU	JLL 🗆 ¾ F	ULL 🗆 ½ FUL	L 🗹 ¼ FULL 🛭] <¼ □ DRY
Is Visibility Impa	ired During Eg	g Mass Counts	? \square YES	₽ NO			
OTHER AMPH	IBIANS, REP	TILES, INVE	RTEBRATE	S, ETC.:			
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
						1	
The training of the second							
NOTES: De	oth 16.1	cm					
,							
	×						
						41)	
	DESCRIPTION	ling					
1	No amphibians call Individuals can be	counted, calls not o	verlapping. Re	cord the number	of individuals callin	g after code separate	1 by hyphen (e.g., 1 - 3)
2	Calls overlap (simu	iltaneous calling), b	out individuals a	re distinguishab	le. Record the number	er of individuals calli	ng after code
	separated by hyphe Full chorus, calls of		lapping. Can no	ot distinguish in	dividuals.		

	LOCALITY:
	WRNWR
	VERNAL POOL NAME:
	Who I ANN South #
	DATE: 4/34/2002
	TIME BEGIN: 1000
9	TIME END: 1025
0	GRID SPACING IS 2.75 m
	INDICATE NORTH ON MAP
	OBSERVER 1
\ @@	K. Hokemb
100	OBSERVER 2
197	200-200-200-200-200-200-200-200-200-200
2 1/2	I Good's
OF DO (N)	* INDICATE WITH LINE WHEN OBSERVERS SWITCH
J	# Egg Masses Dead

				1.					
Species	# Egg N OBS 1	Masses OBS 2	Dead	V Speci	es	# Egg N OBS 1	Aasses OBS 2	Dead	
\ _	3_	************			-				
L 5	_1	-							
3 _5	4		*	-			-	-	
4 5	12								
s <u>5</u>		-		-					
1 5	7		-	-				-	
		-							
					-	•	***************************************		
	-	-		-					
			-						
-	7	****	-	-		-	***		
-				-		-			
-									

OCALITY:	WRNWA	,	VEI	RNAL POO	L NAME: 4	I Dock	Trail #2
rate: 4/20	4/2002	_ Sky Code:	_O_ W	ind Code: _	Previou	s Day Precipitati	on? YES
ir Temp.: 5	1°F	_ Water Tem	p.: 43°4		□ °C 12	∕°F	
ool Max. Depti	h: 17	cm Water L	evel:	TLL % F	ULL 🗌 ½ FULI	L M FULL	< ¼ DRY
Visibility Imp	aired During Eg	g Mass Counts	? 🗆 YES	NO			
THER AMPI	HIBIANS, REP	TILES, INVE	RTEBRATE	S, ETC.:			
PECIES	Chorus Code	# Mated Pairs	Sperma- tophores		Tadpoles/ Larvae	# Juveniles	# Adults
SRFR							1
WK					200+		
			-				-
		ļ	-			-	-
		-					
		-	-			-	
			-			-	
		-					
							1
OTES:							
						F	
HORUS CODE							
	No amphibians cal	counted calls not	overlanning Pa	cord the number	r of individuals calling	g after code separate	d by hyphen (e.g., 1 - 1
	Calls overlan (simu	Itaneous calling).	but individuals	re distinguishat	ole. Record the number	er of individuals calli	ng after code
	separated by hyphe					The same same	5

Egg Masses 3/27/02 Spotter Scl. | Wood Frog

Spotter Sal. | Uoor Frog 4/24/02 5 W 1/24/02 5 W

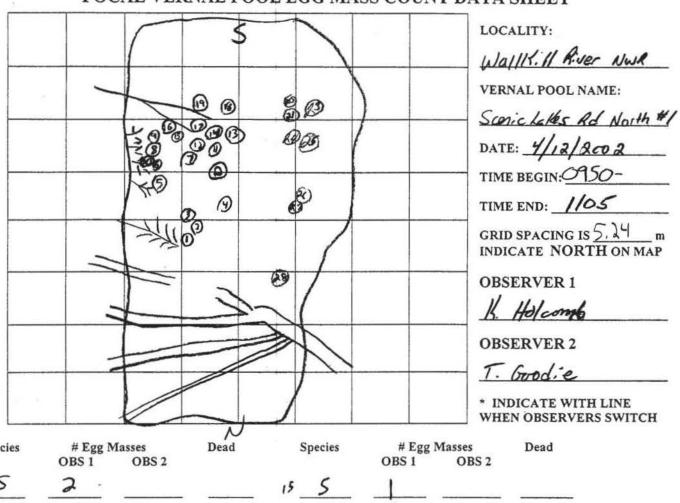
FOCAL VERNAL POOL LOCATION AND HABITAT DATA SHEET

	LOCALITY: WELL! River NWR VERNAL POOL NAME: Scenic La Kes (North #1)
	OBSERVER: K. Holamb / T. Goodie DATE: 3/27/2002
	DETAILED DIRECTIONS TO SITE:
	Scenic Lakes Rd from Postling Area # 11 Walk North ~ 100 yes.
	UTM ZONE: 18 UTM DATUM: NAD 83 UTM E: 0535257 UTM N: 4559545 ERROR: +/- 62m
	LATITUDE (DDMMSS.SS): 4/9/1/1, 23 LONGITUDE: 74°35'25.05 ELEVATION: 122 m ft
	POOL MAX. LENGTH: 4/.9 m POOL MAX. WIDTH: 16.9 m POOL MAX. DEPTH: 36 cm
	POOL PERMANENCY: temporary (dries annually) semipermanent (sometimes dries) permanent (never dries)
	POND TYPE (Check either Natural, Beaver-created, Artificial/Man-made, or Unknown):
	Natural (e.g., oxbow, vernal pool)
	☐ Beaver-created
	☐ Artificial/Man-Made - If pool is artificial/man-made, pick best description below:
	□ borrow/gravel pit □ roadside ditch□ farm pond □ impoundment□ other:
	☐ Unknown
	SITE TYPE: upland-isolated (not part of larger wetland)
	bottomland-isolated (part of a river or lake floodplain)
	wetland complex (associated with a larger wetland complex)
	FISH PRESENT: No Yes If Yes, list Species:
	DISTANCE TO FOREST FROM WATER'S EDGE:
	DISTANCE TO NEAREST ROAD: 82 of 1
35	ROAD IS: PAVED GRAVEL DIRT
	ROAD CONDITIONS AT NIGHT: ☐ Light Traffic (< 10 cars) ☐ Heavy Traffic (≥ 10 cars)
	FOR THE FOLLOWING, RANK the amount of pond area in which each type occurs (does not need to sum to 100%): $0=0\%$, $1=1-10\%$, $2=11-25\%$, $3=26-50\%$, $4=51-75\%$, $5=76-100\%$
	AQUATIC SUBSTRATE: Leaf Litter _ 5 Sticks/Logs _ 2
	AQUATIC VEGETATION: SAV Herb Emergent 3 Cattail Shrub 3 Tree / Other

LAND USE/COVER AROUND VERNAL POOL: Estimate % of each of the land use/cover cate	gories with	in 50 m of p	pool. E	estimates s	hould tot	al 100%:	
% Woodland/Forest							
Hardwood (> 75% deciduous)		22					
Softwood (> 75% evergreen)		F. 45		- 1	1		
Mixed Hardwood/Softwood (< 75% each)			- 4				
If % woodland/forest is entered,	record if cand	py cover over	r the ver	nal pool is he	eavy or mo	oderate:	
Heavy (> 50% canopy cover of to Moderate (< 50% canopy cover			ja L	;	i .		
20 % Agriculture/Fields	or nees/sin uo	(an)					
% Meadow/Marsh							
% Residential/Urban/Suburban							
% Industrial							
% Mining			4				
% Pasture/Rangeland	4						
% Road	×						
% Other:							
NOTES:						<u>#</u>	
**************************************				- 11 - 11	W44	1	
					- 196		
				31			
		-				/1/.	

			S			LOCALITY:	
	4.	4		phys		VERNAL POOL NAM SC NOT!	41
		*	S	3		TIME BEGIN: 13. TIME END: /43. GRID SPACING IS	20 5
			0	0 } /		OBSERVER 1	ON MAF
			2	X		* INDICATE WITH L WHEN OBSERVERS	
Species	# Egg OBS 1	Masses OBS 2	Dead N	Species	# Egg Ma OBS 1	Sses Dead OBS 2	
0 <u>W</u> 0 <u>W</u> 0 S	65						
<u> </u>	6						
0 <u>S</u>			_				
8 <u>S</u>							

LOCALITY: (WIKI R	ver New	VEI	RNAL POO	L NAME: Sa	nic Lakes	(North #1)
							on? YES N
Air Temp.:	8F 50	F Water Tem	p.: 52°	_48_	□ .c 🗹	°F	
Pool Max. Depth	36	cm Water L	.evel: 🔲 FU	ILL 🗹 ¾ F	ULL 🗆 ½ FULI	L N FULL C] < 1/4 [] DRY
Is Visibility Impa	aired During Eg	g Mass Counts	? U YES	NO			
OTHER AMPH	IBIANS, REP	TILES, INVE	RTEBRATE	S, ETC.:			
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
NSPE	/		÷				
WOFR	3	1					
Spottel so	1		2				
				1			
NOTES:							
						*	
	No amphibians call	ling					
0			overlapping Re	cord the number	of individuals calling	g after code senarate	d by hyphen (e.g., 1 - 3)
2					le. Record the number		
	separated by hyphe	n (e.g., 2 - 6)					
3	Full chorus, calls co	ontinuous and ove	rlapping. Can no	ot distinguish in	dividuals.		



Species	# Egg Masses OBS 1 OBS 2	Dead	Species	# Egg M	asses OBS 2	Dead
, 5	2 .		15 5	1		
2 5			16 5	6		
3 5			11 5	1		•
45	2	2	11 5	_1_		-
5 W			11 5	1		
· W	<u> </u>		20 5			
1 <u>S</u>	8		H S			·
8 5	<u> </u>	() 	11_5_			
4 5	2	-	23 W			And the second
10 W			24 <u>S</u>			
" 5			25 W	1		
13 2	8		2 <u>S</u>	: 	2	-
14 _5		—	8 <u>S</u>			1-12-12

LOCALITY: W	14K:11 F	iver NW	R VE	RNAL POO	L NAME: Sa	nic Lakes	Nosta #1
Date: 4/12/6	2002	_ Sky Code:	_2_ w	/ind Code: _	2 Previou	s Day Precipitati	on? YES
Air Temp.: 48,4	. o F 	_ Water Tem	p.: 45.5		□ ∘c □	°F	
Pool Max. Depth:	35	cm Water L	evel: 🔲 FU	JLL 🗆 ¾ F	ULL 1/2 FUL	L 1/4 FULL E] <¼ □ DRY
Is Visibility Impair							
SPECIES	Chorus	# Mated	Sperma-	# Egg	Tadpoles/	# Juveniles	# Adults
	Code	Pairs	tophores	Masses	Larvae		
NSPE	1						
unknown					100+		
Bull							1
			1				
		 			-		
		-			-		
		4					1
						-	
							<u> </u>
NOTES: 1 ad	ult Snapp	ring Turti	le	×			
						DE HE	
CHORUS CODE D		0					
	lo amphibians cal idividuals can be		overlapping. Re	cord the number	of individuals calling	g after code separated	i by hyphen (e.g., 1 - 3)
2 C		iltaneous calling),			ele. Record the number		
3 F	ull chorus, calls c	ontinuous and over	rlapping. Can no	ot distinguish in	dividuals.		

		1				LOCA	LITY:
						W	RNWR
						VERN	AL POOL NAME:
						Sec	ic Lakes North #
						DATE	4/24/02
_		1				1	BEGIN: 0900
							END: 0930
-		1					
		1)		INDIC	SPACING IS m CATE NORTH ON MAP
	\mathcal{J}	1 1		1		OBSI	ERVER 1
						K.	Holcomb
				1			ERVER 2
				1			Goodie
/							
			N				ICATE WITH LINE NOBSERVERS SWITCH
Species	# Egg ! OBS 1	Masses OBS 2	Dead	Species	# Egg N OBS 1	Masses OBS 2	Dead
			-	-		4	
				V			
			-1				
	-				: 		1000 - 100
	***************************************			-	-		
	-		-		*********		
	-				***************************************		,
		-		-			-
				-			***************************************
							Miles and the second se

Code Pairs tophores Masses Larvae 2 ARFR ARK.	PECIES							
nk. Srot			# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
	GREB							2
	unk.					500+		
TES. Prol ENI - Tarrens alea								
OTES. Pool Sell - Tarinasa alea								
OTES. Prod Edl - Tarrens alex				1				1
OTES: Prod. Sall - Tarrensol alea				-				+
OTES: Pool Entl - Tacreard alea								
OTES: Pool Est - Tacteural alea								
OTES: Pool Entl - Targensol alea								
OTES: Pool Ext Tacreard alea								
OTES: Pool Ext Tacreard Alea								T
OTES: Pool Est - Tacsense alea			 			-	 	
OTES. Pool Ext Taciense alea								-
OTES. Pool Enll - Targense alen								
TES. PION FULL - TAKERSO ALCA	Λ.							
7125. 1001 1011 240120	OTES: POOL	tull -	Increase	alea				
TES: POOL FULL - Increased area On: Lalles South #2 GRFR - 1 Ad 43°F 6°C 64 Max Jeeth	1 1 1/4 5		200000	1.41				

							ARING: 272°
							ERROR: 5./
ATITUDE (DDN	MSS.SS): 4	11/1/06,3	S LONGIT	TUDE: <u>74</u>	34 27.97	ELEVATION:	135 m
OOL MAX. LE	NGTH:	/4_ m	POOL MAX	. WIDTH: _		POOL MAX.	DEPTH: <u>36</u>
PECIES	Chorus Code	# Mated Pairs		# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
WOFR	3						2
							14)
		-			-	-	
			-	-			-
						 	
		1	1				
			1				
OCALITY: /	0 111/11	1:05 14	.10	FOCAL VE	RNAL POOL N	AME: Scale	1 - Vac labore
							Lakes (North
BSERVER: /	Holcome	17.6	indie 1	DATE:	3/27/02	# of	50 m sections:
BSERVER: // RANSECT: N	Holcome (S) E	W NEW V	VERNAL PO	DATE:	3/27/02 OR NUMBER:	Score Lak	50 m sections:
BSERVER: // RANSECT: N ISTANCE ALO	Holcome S E NG TRANSI		ERNAL PO	DATE:	3/27/02 OR NUMBER: _ TRANSECT: _	# of Scene Lak 150 m BE	50 m sections: (South the ARING: 272 °
BSERVER: // RANSECT: N ISTANCE ALO TM ZONE: //8	Holcome S E NG TRANSE UTM DAT	V NEW V ECT: <u>/00</u> FUM: NAD 8	VERNAL PO m DISTAL 3 UTM E:	DATE: OL NAME NCE FROM OS 35 6	3/2)/02 OR NUMBER: TRANSECT: _ UTM N:	# of Scene Land 150 m BE 4559386	50 m sections:
BSERVER: // RANSECT: N ISTANCE ALO TM ZONE: //8	Holcome S E NG TRANSE UTM DAT	V NEW V ECT: <u>/00</u> FUM: NAD 8	VERNAL PO m DISTAL 3 UTM E:	DATE: OL NAME NCE FROM OS 35 6	3/2)/02 OR NUMBER: TRANSECT: UTM N:	# of Scene Land 150 m BE 4559386	50 m sections: (South the ARING: 272 °
BSERVER: // RANSECT: N ISTANCE ALO TM ZONE: // ATITUDE (DDN	Holcome S E NG TRANSE UTM DAT MMSS.SS): 4	W NEW V ECT: <u>/00</u> FUM: NAD 8	VERNAL PO m DISTAL 3 UTM E:	DATE: OL NAME (NCE FROM OS 35 6, TUDE: 74	3/2)/02 OR NUMBER: TRANSECT: _ UTM N:	# of Score Lead. /50 m BE. /559386 ELEVATION:	50 m sections:
BSERVER: // RANSECT: N SISTANCE ALO TM ZONE: // ATITUDE (DDN	Holcome S E NG TRANSE UTM DAT MMSS.SS): 4	W NEW V ECT: <u>/00</u> FUM: NAD 8	VERNAL PO m DISTAL 3 UTM E:	DATE: OOL NAME NCE FROM OS 356 TUDE: 74 L. WIDTH: # Egg	3/2)/02 OR NUMBER: TRANSECT: _ UTM N:	# of Score Lead. /50 m BE. /559386 ELEVATION:	50 m sections: 65 (South to a section
BSERVER: // RANSECT: N ISTANCE ALO TM ZONE: // ATITUDE (DDN OOL MAX. LEN	Holcome S E NG TRANSE LUTM DAT AMSS.SS): 4 NGTH:	W NEW V ECT: 100 FUM: NAD 8	VERNAL PO m DISTAL 3 UTM E: // LONGIT POOL MAX	DATE: OOL NAME NCE FROM OS 356 TUDE: 74 L. WIDTH: # Egg	3/2)/02 OR NUMBER: TRANSECT: UTM N: 34'3/09"1 20 m Tadpoles/	# of Score Land /50 m BE. 4539386 ELEVATION:	50 m sections: ARING: _272 ° ERROR: <u>5.6</u> ° DEPTH: _20
BSERVER: // RANSECT: N ISTANCE ALO TM ZONE: // ATITUDE (DDN OOL MAX. LEN	Holcome S E NG TRANSH MMSS.SS): 4 NGTH: Chorus Code	W NEW V ECT: 100 FUM: NAD 8	VERNAL PO m DISTAL 3 UTM E: // LONGIT POOL MAX	DATE: OOL NAME NCE FROM OS 356 TUDE: 74 L. WIDTH: # Egg	3/2)/02 OR NUMBER: TRANSECT: UTM N: 34'3/09"1 20 m Tadpoles/	# of Score Land /50 m BE. 4539386 ELEVATION:	50 m sections: ARING: _272 ° ERROR: <u>5.6</u> ° DEPTH: _20
BSERVER: // RANSECT: N ISTANCE ALO TM ZONE: // ATITUDE (DDN OOL MAX. LEN	Holcome S E NG TRANSH MMSS.SS): 4 NGTH: Chorus Code	W NEW V ECT: 100 FUM: NAD 8	VERNAL PO m DISTAL 3 UTM E: // LONGIT POOL MAX	DATE: OOL NAME NCE FROM OS 356 TUDE: 74 L. WIDTH: # Egg	3/2)/02 OR NUMBER: TRANSECT: UTM N: 34'3/09"1 20 m Tadpoles/	# of Score Land /50 m BE. 4539386 ELEVATION:	50 m sections: ARING: _272 ° ERROR: <u>5.6</u> ° DEPTH: _20

LOCALITY: L	h11K:11	River N	WR	FOCAL VE	RNAL POOL N	AME: Scor	ic Lakes	(Noth
OBSERVER: K	Holamb	T. Gu	d'e	DATE:	3/27/200	3 #	of 50 m sections	
TRANSECT: N					- 18 . William			
DISTANCE ALO								•
UTM ZONE: /								
		The state of the s						
LATITUDE (DD)								
POOL MAX. LE	NGTH:8	m 1	POOL MAX	. WIDTH: _	4-8 m	POOL MAX.	DEPTH:	5 cm
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	ja ja
					-		-	
			-			-	-	-
THE STATE OF THE S		1	-		-			1
-10000								

LOCALITY:				FOCAL VE	RNAL POOL N	AME:		
OBSERVER:			1	DATE:		# o	f 50 m sections:	-
TRANSECT: N	N S E	W NEW V	ERNAL PO	OL NAME	OR NUMBER:			
DISTANCE ALO								
UTM ZONE:								
LATITUDE (DDN								
POOL MAX. LEI								cm
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores		Tadpoles/ Larvae	# Juveniles	# Adults	
							1	
			-		-			-
			-			-	+	-
			-					-

4/12/02 Scenic Lakes South #2 42 cm depth 49.1° # 9.5°C 1 WOFR Egg Mass 5 Unk. Frags 1 Spotted turtle

4/12/02 Scenic Lalles South #3 NSPE Callinder 2

4/12/02 Scoric Lakes #4

4/12/2002

JBRI. #2 19-Rol 55cm dooth 10W wester WOFR Hetching - 1 La Mess
Spotked 2

Spotted Sal. | Wood Frog 4/4/02 Spotted Sal. | Wood Frog 14 35 4/12/02

Egg Musses Spotted Salamander

12 4/24/62

FOCAL VERNAL POOL LOCATION AND HABITAT DATA SHEET
LOCALITY: Wallkill River NWR VERNAL POOL NAME: Judge Beach #1
OBSERVER: K. Hokomb / T. Goodie DATE: 4/4/2002
DETAILED DIRECTIONS TO SITE:
From Julge Beach Al turn onto leftinge by former box, trav
across soil was bed + two SW along pepakating creek
UTM ZONE: 18 UTM DATUM: NAD 83 UTM E: 0534766 UTM N: 456/395 ERROR: +/- 5.8 m
LATITUDE (DDMMSS.SS): 41° 12 /1.06" LONGITUDE: 74°35'06.72" ELEVATION: 123 Pm ft
POOL MAX. LENGTH: 19.5 m POOL MAX. WIDTH: 9.6 m POOL MAX. DEPTH: 12 cm
POOL PERMANENCY: temporary (dries annually) semipermanent (sometimes dries) permanent (never dries)
POND TYPE (Check either Natural, Beaver-created, Artificial/Man-made, or Unknown):
Natural (e.g., oxbow, vernal pool)
☐ Beaver-created
Artificial/Man-Made - If pool is artificial/man-made, pick best description below:
□ borrow/gravel pit □ roadside ditch□ farm pond □ impoundment□ other:
Unknown
SITE TYPE: upland-isolated (not part of larger wetland)
bottomland-isolated (part of a river or lake floodplain)
wetland complex (associated with a larger wetland complex)
FISH PRESENT: No Yes If Yes, list Species:
DISTANCE TO FOREST FROM WATER'S EDGE:
DISTANCE TO NEAREST ROAD: 325 Mm ft
ROAD IS: PAVED GRAVEL DIRT
ROAD CONDITIONS AT NIGHT: ☐ Light Traffic (< 10 cars) ☐ Heavy Traffic (≥ 10 cars)
•
FOR THE FOLLOWING, RANK the amount of pond area in which each type occurs (does not need to sum to 100%): $0 = 0\%$, $1 = 1-10\%$, $2 = 11-25\%$, $3 = 26-50\%$, $4 = 51-75\%$, $5 = 76-100\%$
AQUATIC SUBSTRATE: Leaf Litter 5 Sticks/Logs 3

AND USE/COVER AROUND VERNAL POOL: stimate % of each of the land use/cover categories within 50 m of pool. Estimates should total 100%:	
% Woodland/Forest	
Hardwood (> 75% deciduous)	
□ Softwood (> 75% evergreen)	
☐ Mixed Hardwood/Softwood (< 75% each)	
If % woodland/forest is entered, record if canopy cover over the vernal pool is heavy or moderate:	
Heavy (> 50% canopy cover of trees/shrubs > 6 ft. tall)	
☐ Moderate (< 50% canopy cover of trees/shrubs < 6 ft. tall)	
O% Agriculture/Fields	
% Meadow/Marsh	
% Residential/Urban/Suburban	
% Industrial	
% Mining	
% Pasture/Rangeland	
% Road	
% Other:	
OTES	
OTES:	
	_
	_

* and

FOCAL VE	RNAL POOL I	EGG MAS	S COUNT I	DATA SHEET
	(W)			LOCALITY:
× × ×	19.1		>	VERNAL POOL NAME:
	T		1	Judge Beach #/
	930	60	7	TIME BEGIN: 1055
				GRID SPACING IS 3 INDICATE NORTH ON MAR
				OBSERVER 1
			1	OBSERVER 2
			"	T. Goodie
# Egg Masses	Dead	Species	# Egg Mass	* INDICATE WITH LINE WHEN OBSERVERS SWITCH ses Dead
OBS 1 OBS 2				OBS 2
			<u> </u>	-
1				

Species	# Egg N	Tasses	Dead	Species	# Egg N	Masses	Dead
	OBS 1	OBS 2		7.5	OBS 1	OBS 2	
O W	73		-				
<u> </u>			·		MATERIAL CONTRACTOR		:
3 <u>W</u>					-		
@W	1			*******		***************************************	()
8 5	\$	-	-	2			1
<u>S</u>							
					-		
						-	
		-	-				N ame
						-	
		-	-		-	-	-
			-	-		-	S -11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
				-	-		*********
							-

LOCALITY:	WRNU	R	VE	RNAL POO	L NAME: J	Tidae Rea	ch #1
Date: 4/	4/02	Sky Code:	0 W	find Code:	/ Previou	s Day Precipitati	on? YES NO
Air Temp.: 4	7,5.5	Water Temp	<i>5</i> 5	5/	c ∠	°F	
					ULL 🗆 ½ FUL		
	paired During Eg				_		
	HIBIANS, REP						
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
WOFR	1						
						-	
					_		
			-			-	
			-		-	+	
			1			-	
	- V					-	
					+	1	
						1	
NOTES:			lite.				
						24	
CHORUS CODE	DESCRIPTION						
0	No amphibians call	ing					
2							by hyphen (e.g., 1 - 3)
-	separated by hyphe		out individuals a	re distinguishao	le. Record the number	or marviduais callif	ng after code
3	Full chorus, calls co		lapping. Can no	ot distinguish in	dividuals.		

	-		4	1			LOC	ALITY:
			N)			uki	14:11 River ANNR
			,				VER	NAL POOL NAME:
_			429				Tuo	lee Beach
	(1					DATI	lge Beach e: 4/12/2002
-	\rightarrow	-		8				E BEGIN: 1335
			[1-4]	6				E END: /350
	$\dashv \dashv$						San	SPACING IS 3
							INDI	CATE NORTH ON MAP
				1,,,,,,,				ERVER 1
							K.	Holamb
							OBS	ERVER 2
							- T.	Good'e
	L.							DICATE WITH LINE
								N OBSERVERS SWITCH
Species	# Egg N	Masses OBS 2	Dead		Species	# Egg ! OBS 1	Masses OBS 2	Dead
W	32	0202						
w	1			_				
			***************************************					-
W	1		-	_				
5	14			-				
				-		///		, ;
				_				
			-	_	***************************************	-		
			8	-				
								Approximate the speciments.
		<u> </u>	(<u></u>	_				

LOCALITY:	wallkin	Air N	WR VEI	RNAL POOI	LNAME: JJ	dec Base	6 RI#1
Date: 4/12	12002	_ Sky Code:	2 W	/ind Code:	3 Previou	s Day Precipitati	on? TYES
Air Temp.: 60	205	_ Water Temp	53			∕°F	L RL # on? □ YES □
	th: _6_						
	paired During Eg						
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
			-		-	-	
						+	
						1	
					-		
	-		-			-	
	WOFR I HE						
* All	y 1,+1k Sptkd	Messes	ar ex	(paged)	to air on	top	
CHORUS CODE		in a					
1		counted, calls not o					by hyphen (e.g., 1 - 3)
2	Calls overlap (simu separated by hyphe		out individuals a	re distinguishab	le. Record the numbe	r of individuals calling	ng after code
3	Full chorus, calls co		lapping. Can no	ot distinguish inc	lividuals.		

			OTAL TELL	. 11.11.1	OOL	EGG MI	100 00	011	I DE	IIA	HILLI		
				W						LOCA	LITY:		
										WH	NWR		
				The same of the same						VERN	AL POOL N	AME:	
				>	-			1		Jud	ge Bea	ch #1	_
	-					1		1		DATE	4/24/	2002	_
		1				1	1			TIME	BEGIN:	050	_
					0		1			TIME	END: //C	5	
						1	1			GRID INDIC	SPACING IS	S 3 TH ON MA	
						1	-				ERVER 1	. /	
	-	+	-					-		X-100/Francis		75	
			+								ERVER 2		
											Good.		_
											ICATE WIT		I
	Species	# Egg N OBS 1	Masses OBS 2	Dead		Species	# OBS	Egg M	Iasses OB		Dead		
ω	_5_		_12_		-			_					
		***************************************		-		: ***	-						
					_		-						
		-			-				-				
				-		************		-	-	_			
			***********	*****	_								
								-	-				
				-		-	_						
					_	-			19 5.111				
					_				-	_	-		
	-				-			-	-		-		

GRFR	
OTES: Pool Increased size Francisco to %	The second secon
THE VACENCE OF STATE OF THE ALL AL	occupied det sheets

LOCALITY: Wa	1/K:1/	River	NWA	FOCAL VERN	AL POOL NA	ME: Judg	e Beach	#/
OBSERVER: K.A	bkome	1.60	die 1	DATE:	3/22/0	2	of 50 m sections:	
TRANSECT:					,			
DISTANCE ALONG								
UTM ZONE: 18								
LATITUDE (DDMM					100			
POOL MAX. LENG								
							27.7	cm
SPECIES	Chorus	# Mated Pairs	Sperma- tophores		Tadpoles/ Larvae	# Juveniles	# Adults	
WOFR	2							
LOCALITY: ub	1/1/1	River	NUR	FOCAL VERN	AL POOL NA	ME: Jul	en Rosch	#/
OBSERVER: K. H.	bleach	17 600	16.	DATE	3/21/0	, #	of 50 m sections:	
TRANSECT: (N)								
DISTANCE ALONG								
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E: ∠	2534769	UTM N:	4561604	ERROR: 3.8	Z+/-m
LATITUDE (DDMM								
POOL MAX. LENG	TH: _a	8.5 m PC	OOL MAX	. WIDTH:	20.5 m	POOL MAX. D	EPTH: _ 36	cm
SPECIES	Chorus	# Mated	Sperma-	# Egg	Tadpoles/	# Juveniles	# Adults	
-1	Code	Pairs	tophores	Masses	Larvae			
Spotted Sal							1 Dead	
Spotes Sal NSPE WOFR	3		-					
WOFR				40 hotelie	,			
·								
			1					

UTM ZONE: 18	UTM DAT	TUM: NAD 8	3 UTM E: _	53479	45 UTM N:	456152	ERROR: 5.
							127 Pm
POOL MAX. LE	NGTH:	75 m	POOL MAX	. WIDTH: _	21 m	POOL MAX.	DEPTH: _55
SPECIES	Chorus Code	# Mated Pairs		# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults
WOFR	2			8			
GRFR			-			-	1
			-				
		1					
LOCALITY: W	6/1/6/1	Aiser	NWR	FOCAL VE	RNAL POOL N	AME: Jud	ce Beach
DBSERVER:	S E ONG TRANSE UTM DATE MMSS.SS): 42	V NEW Y CCT: TUM: NAD 8	VERNAL PO m DISTAL 3 UTM E: 4	DATE: DOL NAME NCE FROM NCS 34/7 TUDE: 74/3	4/4/00 OR NUMBER: TRANSECT: _ 69 UTM N:	m BE 456/609	# of 50 m sections: # ARING: ERROR: 3-8
OBSERVER:	S E NO TRANSE C UTM DATE MMSS.SS): 42	M NEW	VERNAL PO m DISTAL 3 UTM E: 4 " LONGIT POOL MAX	DATE: POL NAME NCE FROM 25 3 4/ 7 TUDE: 24/3 . WIDTH: _	4/4/00 OR NUMBER: TRANSECT:	m BE #56/609 ELEVATION: POOL MAX. I	# of 50 m sections: - - - - - - - - -
OBSERVER:	S E ONG TRANSE C UTM DATE MMSS.SS): 42	V NEW Y CCT: TUM: NAD 8	VERNAL PO m DISTAL 3 UTM E: 4	DATE: POL NAME NCE FROM 25 3 4/7 TUDE: 24/3 . WIDTH: _	4/4/00 OR NUMBER: TRANSECT: _ 69 UTM N:	m BE 456/609	# of 50 m sections: - - - - - - - - -

LOCALITY: Wa	114,11	Aire N	WR	FOCAL VERN	NAL POOL NA	AME:Jo	idge B	each A
OBSERVER: //	Holcom	6/ T.600	d.'e	DATE:	1/12/02		# of 50 m secti	ons:
TRANSECT:		•						
DISTANCE ALONG			1					
UTM ZONE:								
LATITUDE (DDMM		101 100						
POOL MAX. LENG	ГН: 9		OOL MAX	. WIDTH:	_2/_m	POOL MAX. I	DEPTH:	cm
SPECIES	Chorus Code	# Mated Pairs		# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
WOFR				1 1g. Ma	35			
WDFR Spotted Sal				2				
			-					-
			-					-
			<u> </u>				1	-
LOCALITY: Wa	114.11	River	Nuk) FOCAL VERN	NAL POOL NA	ME: Joh	n Bear	1 41
OBSERVER: H.								
TRANSECT:					/	127.471.441		
DISTANCE ALONG								
UTM ZONE: 18								
LATITUDE (DDMM	SS.SS): <u>4</u>	12/18,2	LONGIT	UDE: 74 3	507,07 E	LEVATION: _	121 3	m□ ft
POOL MAX. LENG	гн:	28 m PC	OOL MAX	. WIDTH:	20 m	POOL MAX. I	рертн:	32_cm
SPECIES	Chorus	# Mated	Sperma-		Tadpoles/	# Juveniles	# Adults	7
	Code	Pairs	tophores	Masses	Larvae	ļ		_
							 	_
						1		-
			1					
			Y STERROOM TO					

LOCALITY: Like	114:11	River	WA	FOCAL VE	RNAL POOL NA	AME: Ju	dec 6	each &
OBSERVER: H								
TRANSECT: \delta	SE	W NEW V	ERNAL PO	OOL NAME	OR NUMBER:	TA	1-4	2
DISTANCE ALONG	TRANSE	CT:	m DISTA	NCE FROM	TRANSECT: _	m BE.	ARING:	
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E:	5347	UTM N:	456152	ERROR:	5-2+/-m
LATITUDE (DDMM								
POOL MAX. LENG								
SPECIES	Chorus	# Mated Pairs	Sperma- tophores		Tadpoles/ Larvae	# Juveniles	# Adults	
GRER	-						2	
Spotted Sal				-3				
						-	-	_
			-				-	-
LOCALITY: _								
OBSERVER: _K_								
TRANSECT:	SE	W NEW V	ERNAL PO	OOL NAME	OR NUMBER:	J.	B1-B	
DISTANCE ALONG								
UTM ZONE: 18	UTM DAT	UM: NAD 83	UTM E:	5347	769 UTM N:	4561604	ERROR:	38+/-m
LATITUDE (DDMM	(SS.SS): <u>4</u>	18,2	LONGIT	UDE: 245	2502.02 E	LEVATION: _	121	√m□ ft
POOL MAX. LENG	тн: _2	7_m P	OOL MAX	. width: _	22 m	POOL MAX. I	DEPTH:	36_cm
SPECIES	Chorus Code	# Mated Pairs	Sperma- tophores	# Egg Masses	Tadpoles/ Larvae	# Juveniles	# Adults	
spotted sal				1				
			-				1-11-11-11	
			-					-
10					180,000			
			1		1	1		