

Table 1. Summary of Wood Turtle data from summers (June-August) of 2011-2014 used in habitat analyses. Plots were 400m² and contained 1m² Daubenmeir frame centered on each Turtle and random point.

	WV	VA
Turtle points	322	357
Aquatic	94 (29.2%)	43 (12.4%)
WT plots	144	212
Random plots	132	201
Turtles w/transmitters	15/17/2 (M/F/J)	14/28/1
Total turtles	21/25/6	23/37/3

Table 2. Mean values for some habitat variables at adult Wood Turtle and random plots (400m²) and Daubenmeir frames (1m²) at forested sites in NW Virginia and NE West Virginia. V=Virginia, W=West Virginia, FT=female Wood Turtle, MT=male Turtle, FR=female random point, MR=male random point. VA n = 33 FWT, 15 MWT; WV n = 24 FWT, 20 MWT

Canopy (% open at plot)

VA	VFT 18.59	VFR 13.63 *	W = 214, p-value = 2.314e-05	ln transform
	VMT 20.67	VMR 12.09	transforms did not work	W = 31, p-value = 0.002240
WV	WFT 14.91	WFR 16.96		
	WMT 19.42	WMR 15.07 *	W = 94.5, p-value = 0.0045	

Canopy gap (m² in 400m² plot)

VA	VFT 42.23	VFR 11.31 *	W = 164, p-value = 1.036e-06	sqrt transform
	VMT 37.99	VMR 8.42 *	W = 20, p-value = 0.0003661	ln transform
WV	WFT 22.92	WFR 17.04		
	WMT 34.56	WMR 18.19	W = 138.5, p-value = 0.0970	

LWD (amount in plot ≥ 25cm dbh)

VA	VFT 2.18	VFR 1.63 *	W = 344.5, p-value = 0.01038
	VMT 1.99	VMR 1.38 .	W = 60.5, p-value = 0.08829
WV	WFT 1.90	WFR 1.02 *	W = 162.5, p-value = 0.009389
	WMT 1.66	WMR 1.32	

Herbaceous richness (number of taxa in plot)

VA	VFT 16.82	VFR 12.13 *	W = 182, p-value = 0.004423
	VMT 17.29	VMR 13.39	W = 19, p-value = 0.06342
WV	WFT 17.69	WFR 11.32 *	W = 45, p-value = 0.001861
	WMT 16.28	WMR 14.12	

Large trees (number in plot)

VA	VFT 6.43	VFR 7.65 *	W = 703.5, p-value = 0.04195
	VMT 5.97	VMR 6.69	
WV	WFT 6.22	WFR 6.46	
	WMT 6.31	WMR 6.81	

Medium trees (number in plot)

VA	VFT 10.07	VFR 12.28 *	W = 720.5, p-value = 0.02437
	VMT 8.33	VMR 12.77 *	W = 154, p-value = 0.01074
WV	WFT 13.29	WFR 14.08	
	WMT 12.20	WMR 13.49	

Herbaceous cover (% in Daub frames)

VA	VFT 15.21	VFR 4.59 *	W = 197.5, p-value = 6.931e-05	ln transform
	VMT 13.25	VMR 1.90 *	W = 37, p-value = 0.001685	asin-sqrt transform

WV WFT 13.32 WFR 7.67 * $t = -2.0946$, $df = 46.544$, $p\text{-value} = 0.04168$ In trans
WMT 23.41 WMR 8.40 * $t = -3.5219$, $df = 40.763$, $p\text{-value} = 0.001071$ In tran

Herbaceous taxa in plots (there were no fabricated “stands” of ESH in WV – no recent logging). “esh” = early successional habitat, stands aged 0-30 years. “mid-suc.” = mid-successional habitat, stands aged 31-70 years. “mature” = stands aged 71 years to minimum age for “old growth”.

VA ESH 10.71
Mature 15.61
 $W = 1460.5$, $p\text{-value} = 0.01711$

Herbaceous richness in Daub frame (number of taxa 2013-2014)

WV WFT 4.69 WFR 3.12 . $t = -1.8713$, $df = 25.265$, $p\text{-value} = 0.07292$
WMT 6.26 WMR 3.10 * $t = -3.9815$, $df = 20.465$, $p\text{-value} = 0.0007077$
IN WV MALE DAUB HERB AND GRASS SPP. ARE NOT CORRELATED
HERB SPP.
WMT 4.62 WMR 2.16 * $t = -3.6476$, $df = 20.667$, $p\text{-value} = 0.001535$
GRASS SPP.
WMT 1.64 WMR 0.94 * $W = 38.5$, $p\text{-value} = 0.04972$

Herbaceous cover (% in Daub)

VA Total Plots
Mature 10.21
ESH 3.73
 $W = 2927$, $p\text{-value} = 0.03105$

Summer activity areas (ha)

VA VFT 1.94 (n=24)
VMT 1.96 (n=13)
WV WFT 2.46 (n=13)
WMT 2.45 (n=15)

Wilcoxon rank sum test with continuity correction (same as Mann-Whitney U -test).

Levene's Test for Homogeneity of Variance (center = median).

Welch two sample t-test.

Ordinations using metaMDS and envfit functions in the “Vegan” package.

Bonferonni correction applied for Wilcoxon and T-tests.

Statistical analyses conducted in in R version 2.11.

Above data based upon:

VA
33 FWT 15 MWT
WV
24 FWT 21 MWT

Table 3. Importance values of dominant tree species ($IV \geq 0.7$) in plots in VA and WV. Calculated from counts and basal areas of trees > 10cm dbh in each 400m² plot. As can be seen, a greater proportion of sites in WV are mixed (deciduous – conifer) or pine forests than in VA.

	VA	WV
<i>Pinus strobus</i>	2.5	27.0
<i>Quercus alba</i>	20.7	18.4
<i>Acer rubra</i>	15.1	4.1
<i>Pinus virginiana</i>	2.4	14.2
<i>Carya</i> spp.	4.2	13.7
<i>Liriodendron tulipifera</i>	9.5	0.5
<i>Quercus montana</i>	9.1	2.4
<i>Fraxinus americana</i>	7.6	0.6
<i>Quercus rubra</i>	6.7	3.9
<i>Acer saccharum</i>	3.2	5.8
<i>Nyssa sylvatica</i>	5.1	0.9
<i>Quercus coccinea</i>	4.2	0.2
<i>Platanus occidentalis</i>	0.5	1.8
<i>Robinia pseudo-acacia</i>	1.4	0.6
<i>Betula lenta</i>	1.4	0.0
<i>Prunus serotina</i>	0.4	1.3
<i>Amelanchier</i> spp.	1.2	0.5
<i>Quercus velutina</i>	1.1	0.2
<i>Ulmus</i> spp.	0.6	0.9
<i>Pinus rigida</i>	0.4	0.8
<i>Tilia</i> spp.	0.4	0.8
<i>Cornus florida</i>	0.2	0.7
<i>Ostrya virginiana</i>	0.7	0.4
	97.9	99.3

Table 4a. Virginia herbaceous taxa (28, plus grasses; out of 110 total taxa) in ~20% (\geq 24) of Female WT 400m² plots (240 F plots total; 121/119 WT/RP plots for females) in 2011-2013 combined (numbers in [] denote number of plots when <24):

<i>Ageratina altissima</i>	White Snake Root	
<i>Aster</i> spp.	Asters [22]	
<i>Amphicarpaea bracteata</i>	Hog Peanut	
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit	
<i>Boehmeria cylindrica</i>	False Nettle	
<i>Chimaphila maculata</i>	Spotted Wintergreen	
<i>Circaea</i> spp.	Enchanter's Nightshade	
<i>Collinsonia canadensis</i>	Stone Root	
<i>Dioscorea villosa</i>	Wild Yam	
<i>Eurybia divaricata</i>	White Wood Aster	
<i>Galium</i> spp.	Bedstraws	
<i>Goodyera pubescens</i>	Rattlesnake Plantain [23]	
<i>Hieracium venosum</i>	Hawkwort	
<i>Impatiens</i> spp.	Jewelwort	
<i>Lycopus</i> spp.	Bugleworts	
<i>Maianthemum racemosum</i>	Plume Lily (<i>Smilacina</i>) [20]	
<i>Mitchella repens</i>	Partridgeberry	
<i>Nabalus</i> spp.	Gall-of-the-Earth/Rattlesnake Root	
<i>Oxalis</i> spp.	Wood Sorrel	
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	
<i>Polygonatum biflorum</i>	Solomon's Seal [21]	
<i>Polygonum sagittatum/arifolium</i>	Tearthumb [20]	
<i>Potentilla</i> spp.	Cinquefoil	
<i>Prunella vulgaris</i>	Heal-All	
<i>Solidago</i> spp.	Goldenrods	
<i>Uvularia</i> spp.	Bellworts	
<i>Viola</i> spp.	Violets	
<i>Microstigeum vimineum</i>	Stiltgrass	
<i>Parathelypteris noveboracensis</i>	NY Fern	FAC
<i>Onoclea sensibilis</i>	Sensitive Fern	FACW

Table 4b. Virginia herbaceous taxa (27, plus grasses; out of 91 total taxa) in at least 20% (\geq 7) of Male WT 400m² plots (71 plots total; 37/34 WT/RP plots for males respectively) in 2011-2013 combined:

<i>Ageratina altissima</i>	White Snake Root	
<i>Agrimonia gryposephala</i>	Agrimony	FACUW
<i>Amphicarpaea bracteata</i>	Hog Peanut	
<i>Antennaria</i> spp.	Pussytoes	
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit	

<i>Boehmeria cylindrica</i>	False Nettle	
<i>Chimaphila maculata</i>	Spotted Wintergreen	
<i>Circaea</i> spp.	Enchanter's Nightshade	
<i>Collinsonia canadensis</i>	Stone Root	
<i>Dioscorea villosa</i>	Wild Yam	
<i>Eurybia divaricata</i>	White Wood Aster	
<i>Gallium</i> spp.	Bedstraws	
<i>Goodyera pubescens</i>	Rattlesnake Plantain	
<i>Hieracium venosum</i>	Hawkwort	
<i>Impatiens</i> spp.	Jewelwort	
<i>Isotria verticillata</i>	Whorled Pogonia	
<i>Lycopus</i> spp.	Bugleworts	
<i>Maianthemum racemosum</i>	Plume Lily (<i>Smilacina</i>)	
<i>Mitchella repens</i>	Partridgeberry	
<i>Nabalus</i> spp.	Gall-of-the-Earth/Rattlesnake Root	
<i>Oxalis</i> spp.	Wood Sorrel	
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	
<i>Potentilla</i> spp.	Cinquefoil	
<i>Pilea pumila</i>	Clearwort	FACW
<i>Solidago</i> spp.	Goldenrods	
<i>Uvularia</i> spp.	Bellworts	
<i>Viola</i> spp.	Violets	
<i>Microstigeum vimineum</i>	Stiltgrass	
<i>Onoclea sensibilis</i>	Sensitive Fern	FACW

Table 4c. West Virginia herbaceous taxa (26, plus grasses) in at least 20% of FWT 400m² plots (51 total) in 2011-2013 combined:

<i>Aster</i> spp.	Asters
<i>Lespedeza</i> spp.	Bush Clover
<i>Pilea pumila</i>	Clearwort
<i>Cunila origanoides</i>	Dittany
<i>Circaea</i> spp.	Enchanter's Nightshade
<i>Prenanthes</i> spp.	Gall-of-the-Earth
<i>Geranium maculatum</i>	Wild Geranium
<i>Hieracium venosum</i>	Hawkwort
<i>Hepatica americana</i>	Round-lobed Hepatica
<i>Amphicarpaea bracteata</i>	Hog Peanut
<i>Gallium</i> spp.	Bedstraws
<i>Oxalis</i> spp.	Wood Sorrel
<i>Mitchella repens</i>	Partridgeberry
<i>Potentilla</i> spp.	Cinquefoil
<i>Antennaria</i> spp.	Pussytoes
<i>Senecio obovatus</i>	Round-leaved Ragwort
<i>Goodyera pubescens</i>	Rattlesnake Plantain

<i>Solidago</i> spp.	Goldenrods
<i>Chimaphila maculata</i>	Spotted Wintergreen
<i>Gaultheria procumbens</i>	Teaberry
<i>Uvularia perfoliata</i>	Perfoliate Bellwort
<i>Viola</i> spp.	Violets
<i>Parthenocissus quinquefolia</i>	Virginia Creeper
<i>Ageratina altissima</i>	White Snake Root
<i>Eurybia divaricata</i>	White Wood Aster
<i>Dioscorea villosa</i>	Wild Yam
Grass	
<i>Microstigeum vimineum</i>	Stiltgrass
<i>Asplenium platyneuron</i>	Ebony Spleenwort
<i>Polystichum arostichoides</i>	Christmas Fern
moss	

Table 4d. West Virginia herbaceous taxa (28 [26] +1, plus grasses) in at least 20% of 400m² MWT plots (33 total) in 2011-2013 combined:

<i>Aster</i> spp.	Asters
<i>Lespedeza</i> spp.	Bush Clover
<i>Pilea pumila</i>	Clearwort
<i>Cunila origanoides</i>	Dittany
<i>Circaea</i> spp.	Enchanter's Nightshade
<i>Prenanthes</i> spp.	Gall-of-the-Earth
<i>Geranium maculatum</i>	Wild Geranium
<i>Hieracium venosum</i>	Hawkwort
<i>Amphicarpaea bracteata</i>	Hog Peanut
<i>Galium</i> spp.	Bedstraws
<i>Impatiens</i> spp.	Jewelwort [6]
<i>Lycopus</i> spp.	Bugleworts
<i>Alium cernuum</i>	Nodding Wild Onion [6]
<i>Smilacina racemosa</i>	Plume Lily
<i>Oxalis</i> spp.	Wood Sorrel
<i>Mitchella repens</i>	Partridgeberry
<i>Potentilla</i> spp.	Cinquefoil
<i>Antennaria</i> spp.	Pussytoes
<i>Senecio obovatus</i>	Round-leaved Ragwort
<i>Scutellaria</i> spp.	Skullcap
<i>Solidago</i> spp.	Goldenrods
<i>Chimaphila maculata</i>	Spotted Wintergreen [6]
<i>Uvularia perfoliata</i>	Perfoliate Bellwort
<i>Viola</i> spp.	Violets
<i>Parthenocissus quinquefolia</i>	Virginia Creeper
<i>Ageratina altissima</i>	White Snake Root
<i>Eurybia divaricata</i>	White Wood Aster

<i>Dioscorea villosa</i>	Wild Yam
<i>Perilla frutescens</i>	Beefsteak Plant
<i>Microstigeum vimineum</i>	Stiltgrass
<i>Asplenium platyneuron</i>	Ebony Spleenwort
<i>Polystichum arostichoides</i>	Christmas Fern
Grass	
moss	

Table 4e. Virginia taxa (herbs: 34 +1 alien; STRICTLY 28, plus 2 ferns; out of 128 total herb taxa) present in at least *ca.* 20% of any 400m² plot type (311 plots: FWT, MWT, FRP, or MRP; 71 M plots total, 37/34 WT/RP plots for males; 240 F plots total; 121/119 WT/RP plots for females) in 2011-2013 combined:

<i>Ageratina altissima</i>	White Snake Root	
<i>Agrimonia gryposephala</i>	Agrimony	FACUW
<i>Amphicarpaea bracteata</i>	Hog Peanut	
<i>Antennaria</i> spp.	Pussytoes	
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit	
<i>Aster</i> spp.	Asters [22]	
<i>Boehmeria cylindrica</i>	False Nettle	
<i>Chimaphila maculata</i>	Spotted Wintergreen	
<i>Cicuta maculata</i>	Water Hemlock [14]	
<i>Circaea</i> spp.	Enchanter's Nightshade	
<i>Collinsonia canadensis</i>	Stone Root	
<i>Cunila origanoides</i>	Dittany	
<i>Dioscorea villosa</i>	Wild Yam	
<i>Eurybia divaricata</i>	White Wood Aster	
<i>Galium</i> spp.	Bedstraws	FACU (<i>triflorum</i>)
<i>Goodyera pubescens</i>	Rattlesnake Plantain	
<i>Hieracium venosum</i>	Hawkwort	
<i>Impatiens</i> spp.	Jewelwort	
<i>Isotria verticillata</i>	Whorled Pogonia [13]	
<i>Lycopus</i> spp.	Bugleworts	
<i>Maianthemum racemosum</i>	Plume Lily	FACU (<i>Smilacina</i>)
<i>Medeola virginiana</i>	Indian Cucumber Root [15]	
<i>Mitchella repens</i>	Partridgeberry	
<i>Nabalus</i> spp.	Gall-of-the-Earth	FACU (<i>albus, altissimus</i>)
<i>Oxalis</i> spp.	Wood Sorrel	
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	
<i>Pilea pumila</i>	Clearwort [18]	FACW
<i>Polygonatum biflorum</i>	Solomon's Seal [21]	
<i>Polygonum sagittatum/arifolium</i>	Tearthumb [20]	
<i>Potentilla</i> spp.	Cinquefoil	
<i>Prunella vulgaris</i>	Heal-All	
<i>Solidago</i> spp.	Goldenrods	
<i>Uvularia</i> spp.	Bellworts	

<i>Viola</i> spp.	Violets	
<i>Perilla frutescens</i>	Beefsteak Plant [23]	
<i>Microstigeum vimineum</i>	Stiltgrass	
<i>Parathelypteris noveboracensis</i>	NY Fern	FAC
<i>Onoclea sensibilis</i>	Sensitive Fern	FACW

Table 4f. West Virginia herbaceous taxa (35 +1, plus ferns and grasses) in at least *ca.* 20% of any 400m² plot type (FWT, MWT, FRP, or MRP; 159 total) in 2011-2013 combined:

<i>Ageratina altissima</i>	White Snake Root	
<i>Alium cernuum</i>	Nodding Wild Onion	
<i>Amphicarpaea bracteata</i>	Hog Peanut	
<i>Antennaria</i> spp.	Pussytoes	
<i>Aster</i> spp.	Asters	
<i>Chimaphila maculata</i>	Spotted Wintergreen	
<i>Circaea</i> spp.	Enchanter's Nightshade	
<i>Cunila origanoides</i>	Dittany	
<i>Dioscorea villosa</i>	Wild Yam	
<i>Epigaea repens</i>	Trailing Arbutus	
<i>Eurybia divaricata</i>	White Wood Aster	
<i>Galium circaezans</i>	Wild Licorice [7]	
<i>Galium</i> spp.	Bedstraws	
<i>Gaultheria procumbens</i>	Teaberry	
<i>Geranium maculatum</i>	Wild Geranium	
<i>Goodyera pubescens</i>	Rattlesnake Plantain	
<i>Hepatica americana</i>	Round-lobed Hepatica	
<i>Hieracium venosum</i>	Hawkwort	
<i>Impatiens</i> spp.	Jewelwort [6]	
<i>Lespedeza</i> spp.	Bush Clover	
<i>Lycopus</i> spp.	Bugleworts	
<i>Maianthemum racemosum</i>	Plume Lily (<i>Smilacina</i>)	FACU
<i>Mitchella repens</i>	Partridgeberry	
<i>Nabalus</i> spp.	Gall-of-the-Earth (<i>Prenanthes</i>)	FACU
<i>Oxalis</i> spp.	Wood Sorrel	
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	
<i>Pilea pumila</i>	Clearwort	
<i>Potentilla</i> spp.	Cinquefoil	
<i>Scutellaria</i> spp.	Skullcaps	
<i>Senecio obovatus</i>	Round-leaved Ragwort	
<i>Solidago</i> spp.	Goldenrods	
<i>Uvularia perfoliata</i>	Perfoliate Bellwort	
<i>Uvularia</i> spp.	Bellwort [8] (<i>puberula</i>)	
<i>Viola</i> spp.	Violets	
<i>Perilla frutescens</i>	Beefsteak Plant	

Grass

Microstigeum vimineum

Asplenium platyneuron

Polystichum arostichoides

moss

Stiltgrass

Ebony Spleenwort

Christmas Fern

Table 5. Demographic information reported for Wood Turtle populations. Population estimates with a “j” include juvenile turtles. Densities denoted with an * were estimated by this author using estimated population sizes and using a 200 meter zone on both sides of the stream (i.e., 400m total) to calculate the area of available habitat. C-J-S = Cormack-Jolly-Seber, J-S = Jolly-Seber, L-P = Lincoln-Peterson.

Location	Census numbers (F:M:J)	Sampling duration (years)	Estimated population size	Method of estimation	Density (turtles/ha)	Stream length (km)	Researcher
WV	32:27:13	9	77	C-J-S	0.70*	2.75	Krichbaum (this study)
VA	44:38:12	3	73	J-S	1.14*	1.6	Akre & Ernst 2006
VA	32:23:9	8	44	J-S	0.27*	4.1	Akre & Ernst 2006
VA	42:43:35	3	88	J-S	0.85*	2.6	Akre & Ernst 2006
WV	Not reported	3	331	L-P	0.33*	25	Spradling <i>et al.</i> 2010
WV	49:52:86	2	287 j	Schnabel	4.22* (~2.28 adults)	1.7	Niederberger & Seidel 1999
PA	39:28:21	6	159	Schumacher & Eschmeyer	0.66		Ernst 2001a
IA	Not reported	6	77	L-P	0.16*	12	Spradling <i>et al.</i> 2010
WI	15:8:1	4	Not reported	na	0.19*	3.2	Ross <i>et al.</i> 1991
Ontario	21:15:19	2	56 j	L-P	0.21*	4.5	Greaves & Litzgus 2009
Quebec	188	2	238 j	L-P	0.44	7.8	Walde <i>et al.</i> 2003
Quebec	23:20:9->11:11:2	2	52.4 -> 25.6	J-S	0.23 -> 0.11*	5.7	Daigle & Jutras 2005

Table 6. Summary of values for realized population growth rate (λ), seniority (γ), apparent survival (ϕ), and capture probabilities (ρ) for WV Wood Turtles using adjusted Pradel models in MARK. \hat{c} =0.75.

Model	λ for females	λ for males	γ for females	γ for males	ϕ for females	ϕ for males	ρ for females	ρ for males
$\phi(.)p(\text{sex}(t))\gamma(\text{sex}(.))$	0.8493	1.0102	1.0000	0.8408	0.8493	0.8493	0.0182-0.4754	0.2104-0.6619
$\phi(\text{sex}(.)p(\text{sex}(t))\gamma(\text{sex}(.))$	0.8935	0.9944	1.0000	0.8233	0.8935	0.8187	0.0210-0.4441	0.2124-0.6990
$\phi(.)p(\text{sex}(t))\gamma(.)$	0.9755	0.9755	0.8727	0.8727	0.8513	0.8513	0.0352-0.4706	0.2047-0.6619
$\phi(.)p(\text{sex}(.)\gamma(\text{sex}(.))$	1.1643	1.0448	0.8142	0.8142	0.9479	0.8507	0.2903	0.5253
$\phi(\text{sex}(.)p(\text{sex}(.)\gamma(\text{sex}(.))$	1.1689	1.0419	0.8075	0.8196	0.9439	0.8540	0.2941	0.5229
$\phi(.)p(\text{sex}(.)\gamma(\text{sex}(.))$	1.1570	1.0556	0.7677	0.8414	0.8882	0.8882	0.3268	0.5035
$\phi(.)p(\text{sex}(.)\gamma(.)$	1.1020	1.1020	0.8074	0.8074	0.8897	0.8897	0.3169	0.5111

Table 7a. Highest ranked candidate models from conditional logistic regression describing male Wood Turtles' habitat use (400m² plots) in Virginia, USA in 2011-2014 (transformed dataset without number of herbaceous taxa).

	<i>AIC_c</i>
Model	
Dist+Seedspp+Snags+Can+ASPB	24.30
Dist+Large+Seedspp+Snags+Can+ASPB	24.61
Dist+Shrubspp+Seedspp+Can+ASPB+Slope	26.16
Dist+Shrubspp+Can+ASPB+Slope	26.67
Dist+Shrubspp+Snags+Can+Slope+ASPB	27.07

Table 7b. Candidate models from conditional logistic regression describing female Wood Turtles' habitat use in West Virginia, USA in 2011-2014 (transformed dataset without number of herbaceous taxa).

	<i>AIC</i>
Model	
Dist+Medium+Obs4+Treespp+Shrubspp+LWD10+LWD4+Elev	44.21
Dist + Medium + Obs4 + Treespp + Shrubspp + LWD10 + LWD4 + Snags + Elev	44.93
Dist + Medium + Obs4 + Treespp + Shrubspp + LWD10 + LWD4 + ASPB + Elev	45.08
Dist + Large + Medium + Obs4 + Treespp + Shrubspp + LWD10 + LWD4 + ASPB + Elev	45.27
Dist + Medium + Obs4 + Shrubspp + LWD10 + Elev	46.56

Table 8. Plot ordination axes coefficients for Figs. 2a-d

VMT NMDS

stress = 8.626

	NMDS1	NMDS2
Dist	0.13995348	0.0223456064
Dlwd10	0.12865022	0.1129238157
Large	0.07978452	-0.0266610428
Medium	0.11068970	-0.0001823359
Obs1	-0.18181318	0.0589955442
Obs4	-0.02319245	-0.0001780587
Treespp	0.02900479	-0.0313668269
Shrubspp	-0.05699538	0.0068435028
Seedspp	0.01154203	-0.0155945983
Gapsizem2	-0.35993350	0.0296303787
LWD10	-0.14355891	-0.2102509607
LWD4	0.03306869	-0.0759929363
Snags	0.09830656	0.0265494773
Can	-0.10222669	0.0262976137
Slope	0.09017625	0.0788511640
ASPB	-0.10554787	0.0813703205
Elev	0.01449858	-0.0019438225
Age	0.05796055	-0.0494015423

VFT NMDS

stress = 12.775

	NMDS1	NMDS2
Dist	-0.149728125	-0.0857825850
Large	-0.101199199	-0.0121601519
Medium	-0.033183235	-0.1082104637
Obs1	0.144894330	-0.0087987963
Obs4	0.036621623	-0.0202358344
Treespp	-0.005401843	-0.0433283922
Shrubspp	0.050794915	-0.0064449226
Seedspp	-0.011831171	-0.0288047149
Gapsizem2	0.334055284	0.1919173414
LWD10	0.005543537	0.1129439627
LWD4	-0.091175724	0.0976848841
Snags	-0.131757519	0.1834125440
Can	0.051579411	0.0045864410
Slope	-0.076754917	-0.0689940147
ASPB	0.034761073	-0.0003936512
Elev	-0.005576048	-0.0352331837
Age	0.025260094	-0.0138855401

WFT NMDS (with number of herbaceous taxa)
stress = 11.520

	NMDS1	NMDS2
Dist	-0.211607277	-0.103626695
Large	0.135404808	-0.067371709
Medium	-0.005050906	-0.113189214
Obs1	0.102588094	0.020538960
Obs4	0.036904717	-0.028416388
Treespp	0.065585271	-0.032941950
Shrubspp	0.076293543	-0.007245887
Seedspp	0.125138858	0.102297313
Herb	0.144386699	0.027997192
Gapsizem2	-0.176689730	0.221916905
LWD10	-0.021711764	0.070463591
LWD4	-0.083224552	0.040200629
Snags	-0.143752317	0.050045409
Slope	-0.142405930	-0.158589397
ASPB	-0.176294142	0.154175505
Elev	0.035953918	-0.026181782

WMT NMDS (with number of herbaceous taxa)
stress = 10.245

	NMDS1	NMDS2
Dist	0.1594593671	-0.203886685
Dlwd10	0.1437202017	0.092587667
Large	0.0404768254	0.009625664
Medium	-0.0227921204	-0.070729686
Obs1	-0.0862068021	0.081553726
Obs4	0.0008567463	0.076820473
Treespp	0.0095712509	0.044489594
Shrubspp	-0.0237024850	0.046035175
Seedspp	0.0470787774	0.089837704
Herb	-0.0046254316	0.082978139
Gapsizem2	-0.2539146347	0.044342464
LWD10	-0.2362686109	-0.151189940
LWD4	-0.1325634388	-0.209327378
Snags	-0.1552522951	-0.028164416
Can	-0.0337840963	0.027617108
Slope	0.1625219311	-0.129581967
ASPB	0.1514063639	0.000886548
Elev	0.0269868075	0.015823955

Table 9. Sites in VA and WV searched for Wood Turtles in 2006-2009 during periods of favorable weather conditions; no Turtles were found.

Bear Run (Shen. Co.)	May 11	
Bear Run (Shen. Co.)	June 30	
Beetle Run (Shen. Co.)	Sept. 30	
Bennett Run (Rockingham co.)	Sept. 27	
Bird Haven Run (Shen. Co.)	Sept. 30	
Browns Run (Page Co.)	Sept. 15	
Buck Lick Run (Rockingham C.)	July 17	
Buck Lick Run (Rockingham co.)	October 25	
Bull Run (Shen. Co.)	May 11	
Carr Run (Rockingham co.)	Sept. 27	
Cedar Creek (Shenandoah co.)	September 15	
Cold Spring River (Rock Co.)	Sept. 6	
Cold Spring River (Rockingham co.)	Sept. 27	
Dry River headwaters (Rock. co.)	May 8	
Duncan Hollow (Page co.)	September 24	
Duncan Hollow (Page co.)	April	
Gate Run (Rock. Co.)	Nov. 9	
Gate Run (Rockingham co.)	September 6	
Halfmoon Run (Hardy co. WV)	October 29	
Hogpen Run (Rock. Co.)	March 9	
Hogpen Run (Rock. Co.)	April 5	
Hogpen Run (Rockingham co.)	October 25	
Hunkerson Run (Hardy co. WV)	October 9	
Lairs Run (Rock. Co.)	Nov. 9	
Laurel Run (Shen. Co.)	May 10	
Laurel Run (Shen. Co.)	June 28	
Laurel Run (Shen. Co.)	June 29	
Laurel Run and Narrow Passage Creek (Shenandoah Co.); Root Run and Strike Run (Rockingham Co.)		
Little Fork (Pendleton co., WV)	October 26	
Little Mtn. stream – tributary of Martin Lick Run (Rock. Co.)		Nov. 6 & 9
Little Passage Creek (Shen. co.)	September 24	
Little Passage Creek (Shen. co.)	November 10	
Little Stony Creek (Shen. Co.)	April 6	
Little Stony Creek (Shenandoah Co.)	Aug. 16	
Long Run (Rock. Co.)	April 5	
Lower Cove Run (Hardy Co. WV)	Sept. ?day	
Martin Lick Run (Rock. Co.)	June 26 & 29	
Martin Lick Run (Rockingham co.)	November 9	
Massanutten stream (Warren Co.)	June 23	
Mill Run (Veach Gap) (Shen. co.)	September 24	
Miller Run (Pendleton co. WV)	Nov. 14	
Miller Run (Pendleton Co.)	Sept. 6	

Morgan Run (Page co.)	May 1	
Mountain Run/Fridley Run (Rockingham co.)	April 24	
Narrow Passage Creek (Shen. Co.)	April 10	
Overly Run (Rockingham co.)	Sept. 27	
Paddy Mtn. streams between Shell Run and Salus Spring (Shenandoah co.)	September 25	
Passage Creek (Shenandoah co.)	September 24	
Peters Mill Run (Shenandoah co.)	September 24	
Rader Run (Rock. Co.)	July 7	
Rader Run (Rock. Co.)	Aug. 11	
Rinker Run – upper Stony Creek (Shen. Co.)		Sept. 30
Root Run (Rock. Co.)	Sept. 16	
Root Run (Rock. Co.)	Sept. 26	
Salus Spring (Shen. Co.)	Sept. 5	
Salus Spring Run (Shenandoah co.)	September 15	
segments of upper Passage Creek (Page Co.), Falls Run and Beetle Run (Shenandoah Co.)		
Seng Run (Pendleton co., WV)	October 26	
Shenandoah River South Fork (Page Co.)	July 19	
Sinuous Stream (Hardy co.)	June 30	
Slate Run (Rock. Co.)	March 10	
Slate Run (Rockingham C.)	July 17	
Slate Run above and below dam (Rock. Co.)		Jan. 5
Slate Run below dam (Rock. Co.)	July 9	
Snake Hollow (Rock. Co.)	July 7	
Strike Run – Spring Run (Rock. Co.)	May 19	
Sugar Run (Pendleton co., WV)	October 26	
Trout Pond Run (Hardy co. WV)	October 9	
Trout Run (Hardy co.)	June 30	
Turner Run (Rockingham co.)	October 4	
Veach's Gap stream (Shen. Co.)	July 16	
Yellow Spring Creek (Shen. Co.)	July 1	
Yellow Spring Creek (Shen. Co.)	April 10	