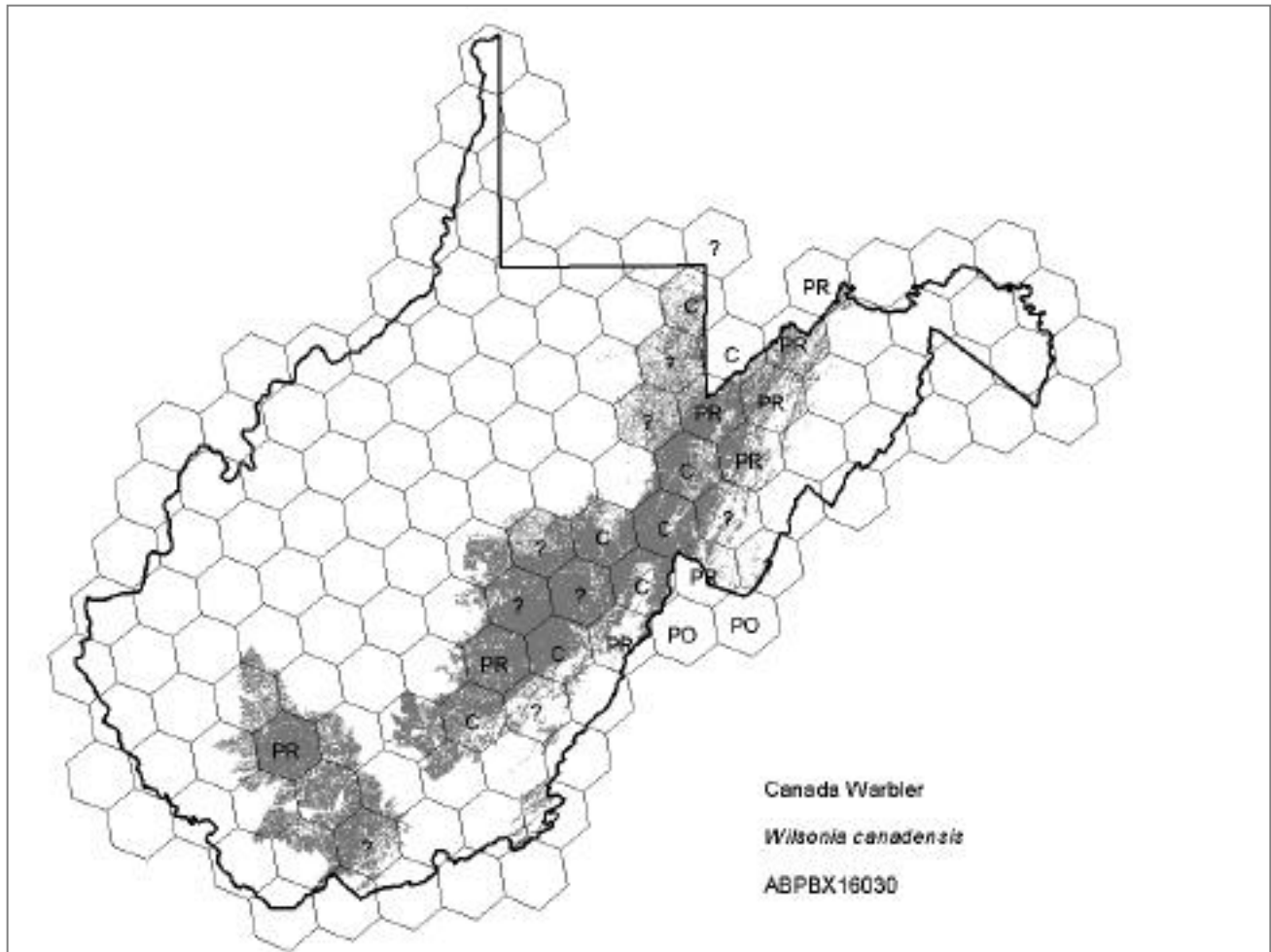


Appendix 3-1. Example of a predicted distributional map of one of the 312 vertebrate species mapped by WV-GAP. All maps are compiled within the WV-GAP Vertebrate Species Map Atlas. Letters within hexagons refer to qualifications on species occurrences as defined in [Table 3-1](#). See Chapter 7 for availability of the atlas.




Appendix 3-2. Example of information contained in a wildlife species atlas for each of the 312 vertebrate and 124 butterfly species mapped by WV-GAP. All information is compiled within the WV-GAP Vertebrate Species Map Atlas. See Chapter 7 for availability of the atlas.


Common Name:	Canada Warbler	TNC Global Status:	G5
Scientific Name:	<i>Wilsonia canadensis</i>	Federal Status:	
TNC Element Code:	ABPBX16030	WV Status:	
		WV Abundance:	Occasional

Habitat Associations:
 Is found in a variety of habitats and in varying elevations (De91B01), but favors shrubby growth in cool, moist, open woodlands (De91B01, Bu94B01, Ha75B01), streamside (De91B01) thickets (De91B01, Bu94B01), and weedy ravines (De91B01, Ha75B01). Also swamps, moist brushlands, and rhododendron thickets (Ha75B01). In WV, found in understory of virgin spruce-northern hardwoods (Ha83B01, Bu94B01), spruce forest (Ha83B01), northern hardwoods (Ha83B01, Bu94B01), and hardwood forests in ravines with hemlock and rhododendron undergrowth (Ha83B01). Is also found in road cuts and along the edges of ponds and bogs (Bu94B01). Ground nester (De91B01, Bu94B01) and one of the most common breeding birds in boreal bogs in WV.

Land Cover Type:	Total Area(ha):	Total number of hexagons with species reported: 13
Surface water	35709.26	Total area of habitat (ha): 46792.75
Light intensity urban	9656.24	
Herbaceous wetland	1427.25	

West Virginia Gap Analysis 2000
 Bird Species Atlas 

Appendix 3-3. Example of WV-GAP Wildlife Habitat Relationship (WHR) database entry for Canada Warbler. WHR database records were compiled for 124 butterflies and 312 vertebrate wildlife species in West Virginia.

Canada Warbler		West Virginia Gap Analysis Species Habitat Relationship Database Birds	
<i>Wilsonia canadensis</i>			
NORTHERN FOREST		CENTRAL FOREST	
Spruce-fir		Upland oaks	
red spruce (SAF32)	<input type="checkbox" value="1"/>	bear oak (SAF43)	<input type="checkbox" value="0"/>
red spruce/balsam fir (SAF33)	<input type="checkbox" value="1"/>	chestnut oak (SAF44)	<input type="checkbox" value="0"/>
red spruce/yellow birch (SAF30)	<input type="checkbox" value="1"/>	white/black/red oak (SAF52)	<input type="checkbox" value="0"/>
Pine and hemlock		white oak (SAF53)	<input type="checkbox" value="0"/>
Eastern white pine (SAF21)	<input type="checkbox" value="0"/>	red oak (SAF55)	<input type="checkbox" value="0"/>
white pine/hemlock (SAF22)	<input type="checkbox" value="0"/>	Other central types	
hemlock (SAF23)	<input type="checkbox" value="1"/>	black locust (SAF50)	<input type="checkbox" value="0"/>
wh.pine/r.oak/r.maple (SAF20)	<input type="checkbox" value="0"/>	yellow poplar (SAF57)	<input type="checkbox" value="0"/>
wh.pine/chestnut oak (SAF51)	<input type="checkbox" value="0"/>	y.poplar/hemlock (SAF58)	<input type="checkbox" value="1"/>
hemlock/y.birch (SAF24)	<input type="checkbox" value="1"/>	y.poplar/white/red oak (SAF59)	<input type="checkbox" value="0"/>
Northern hardwoods		river birch/sycamore (SAF61)	<input type="checkbox" value="0"/>
sugar maple (SAF27)	<input type="checkbox" value="1"/>	silver maple/elm (SAF62)	<input type="checkbox" value="1"/>
sug.maple/beech/birch (SAF25)	<input type="checkbox" value="1"/>	sassafras/persimmon (SAF64)	<input type="checkbox" value="0"/>
sug. maple/basswood (SAF26)	<input type="checkbox" value="1"/>	pin oak/sweetgum (SAF65)	<input type="checkbox" value="0"/>
black cherry/maple (SAF28)	<input type="checkbox" value="1"/>	pitch pine (SAF45)	<input type="checkbox" value="0"/>
beech/sugar maple (SAF60)	<input type="checkbox" value="1"/>	eastern red cedar (SAF46)	<input type="checkbox" value="0"/>
red maple (SAF108)	<input type="checkbox" value="1"/>	Bottomland	
hawthorn (SAF109)	<input type="checkbox" value="0"/>	black willow (SAF95)	<input type="checkbox" value="1"/>
SOUTHERN FOREST		MODIFIERS	
Southern yellow pines		forest (80-100% cover)	<input type="checkbox" value="1"/>
Virginia pine (SAF79)	<input type="checkbox" value="0"/>	woodland (25-60% cover)	<input type="checkbox" value="1"/>
Oak-pine		sparse woodland (10-25% cover)	<input type="checkbox" value="0"/>
shortleafpine/oak (SAF76)	<input type="checkbox" value="0"/>	minimum elevation (m)	<input type="text" value="600"/>
Virginia pine/oak (SAF78)	<input type="checkbox" value="0"/>	maximum elevation (m)	<input type="text"/>
WETLANDS		Reference: <input type="text" value="Gap"/>	
aquatic bed (PAB)	<input type="checkbox" value="0"/>	lower perennial riverine	<input type="checkbox" value="0"/>
unconsolidated shore (PUS)	<input type="checkbox" value="0"/>	upper perennial riverine	<input type="checkbox" value="0"/>
moss/lichen (PML)	<input type="checkbox" value="1"/>	intermittent riverine	<input type="checkbox" value="0"/>
emergent (PEM)	<input type="checkbox" value="0"/>	riparian	<input type="checkbox" value="1"/>
scrub/shrub decid. (PSS)	<input type="checkbox" value="1"/>	palustrine open water (POW)	<input type="checkbox" value="1"/>
scrub/shrub conif. (PSS)	<input type="checkbox" value="1"/>	lacustrine	<input type="checkbox" value="0"/>
scrub/shrub dead (PSS)	<input type="checkbox" value="1"/>		
forested decid. (PFD)	<input type="checkbox" value="1"/>		
forested conif. (PFD)	<input type="checkbox" value="1"/>		
forested dead (PFD)	<input type="checkbox" value="1"/>		
Wetlands types based on Cowardin et al. 1979.		WV GAP Reference Code: 1	
		WV GAP Species Code: 41520	
		TNC Element Code: ABPBX16030	
		Keyto Values: 0 = no data 1 = habitat present	

Appendix 3-4. Example of WV-GAP wildlife crosswalk database entry. Crosswalk database was used to translate WV-GAP WHR database entries for use with the final WV-GAP wildlife habitat map. Crosswalk database entries were compiled for 124 butterflies and 312 vertebrate wildlife species in West Virginia.

Species Code: 41520 Class: AVES Common Name: Canada Warbler Scientific Name: <i>Wilsonia canadensis</i>	WV Gap Analysis <i>Species-Habitat Crosswalk Database</i>
Developed Cover Types	Natural Forest Types (Alliance Complexes)
rural residential <input style="width: 50px;" type="text" value="0"/>	mixed mesophytic / hardwood forests <input style="width: 50px;" type="text" value="3"/>
high intensity residential <input style="width: 50px;" type="text" value="0"/>	floodplain <input style="width: 50px;" type="text" value="2"/>
high intensity commercial/other <input style="width: 50px;" type="text" value="0"/>	conifer/hardwoods <input style="width: 50px;" type="text" value="0"/>
row crops <input style="width: 50px;" type="text" value="0"/>	cove hardwoods <input style="width: 50px;" type="text" value="1"/>
hay/pasture <input style="width: 50px;" type="text" value="0"/>	oak dominant forests <input style="width: 50px;" type="text" value="0"/>
bare soil <input style="width: 50px;" type="text" value="0"/>	mountain hardwoods/northern hardwoods <input style="width: 50px;" type="text" value="5"/>
planted grassland <input style="width: 50px;" type="text" value="0"/>	mountain hardwoods/conifers <input style="width: 50px;" type="text" value="2"/>
orchard <input style="width: 50px;" type="text" value="0"/>	mountain conifers <input style="width: 50px;" type="text" value="2"/>
conifer plantation <input style="width: 50px;" type="text" value="1"/>	open water <input style="width: 50px;" type="text" value="3"/>
	PEM: <input style="width: 50px;" type="text" value="0"/> PSS: <input style="width: 50px;" type="text" value="1"/> PFO: <input style="width: 50px;" type="text" value="1"/>
Natural Cover Types (Non-Forest)	Elevational Requirements
shrubland <input style="width: 50px;" type="text" value="3"/>	maximum <input style="width: 50px;" type="text" value="n. a."/>
grassland <input style="width: 50px;" type="text" value="0"/>	minimum <input style="width: 50px;" type="text" value="600"/>
woodland <input style="width: 50px;" type="text" value="0"/>	