### Blandy Experimental Farm's Snake Savvy Integrated Activity using DGIF's A Guide to Snakes and Lizards of Virginia

- 1. In this activity, students learn about the diversity of snakes in Virginia. They will also share and compare the snake species they discover with classmates.
- 2. Preparation- Set up a table with the *A Guide to the Snakes and Lizards of Virginia books*, student data sheets, pencils crayons, colored pencils, rulers and measuring devices, register tape or butcher paper.
- 3. Instructional Strategy
  - a. Language Arts connection: Ask for a definition or example of a non-fiction book. What are some of the components of a non-fiction book (link here to SOL that lists table of contents, index, etc. for participants as a resource).
  - b. Instruct students: In groups of two, you will learn about and become an expert about one species of snake that lives in Virginia.
  - c. To each group of two students, give a snake species page and A Guide to the Snakes and Lizards of Virginia.
  - d. Instruct students to share responsibility of reading about their assigned snake, looking for key words to find out what the snake eats, its habitat, how to identify it, so on. Circulate around the room to help students, asking accompanying chaperones and teachers for assistance.
  - e. Once they have completed their research, students' next steps are to gather tools from the central table. Depending on location, they will either use register tape, butcher paper, or chalk and concrete to measure out the length of the snake and draw the snake with its pattern(s). Each group should also write the species name next to the drawing. You can allow some artistic license here; it can be scaffolded for the students. Some will be fastidious with the scale patterns.
  - f. Once each group has completed drawing their snake, bring class back together and give time for groups to share about their snake, its patterns, diet, habitat, and interesting facts. (as time allows)
  - g. If using the register tape or butcher paper, create a graph of comparative lengths for all the snakes. When forming the graph, use mathematical language such as:
    - Which is the shortest snake length?
    - Which is the longest snake length?
    - How do we form this graph? Encourage discussion among students.
  - h. Remember to discuss some of the misconceptions that people have regarding snakes and to allay concerns about all snakes being venomous. Phrase a question that incorporates probability discussion such as "Given the thirty-two snake species we have in Virginia. How many of them are venomous? (3.) How likely are we to see a venomous snake in the wild? Certain, likely, unlikely, impossible.
  - i. Probability: Give an example. If I am outside in this area and for a whole year, I only see non-venomous snakes where I work, what is your prediction that we will see a venomous snake today? Certain, likely, unlikely, impossible. Are most of the snakes that can be found in the wild venomous or non-venomous?

Virginia Standards addressed (Those in parentheses are possible extensions.)
English 2.8, 2.12, 3.6, 3.10, 4.6, 6.1, 6.4, 6.6, (6.2, 6.5, 6.8, 6.9, 7.1, 7.2, 7.4, 7.5, 7.6, 7.8, 7.9)
Mathematics 2.8, 2.15, 3.7, 3.15, 3.14, 3.16, 4.8, 4.13, 4.14, 6.2, 6.3, 6.12, 7.1, 7.8, 7.9
Science (2018) 2.1, 2.5, 3.1, 3.4, 4.1, 4.3, 4.8, 6.1, 6.9, LS.4, LS.8, LS.9, LS.10





Snake	Northern Brownsnake
Page #	12
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Northern Red-Bellied Snake
Page #	13
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Ring-Necked Snake
Page #	14
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Southeastern Crowned Snake
Page #	11
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Eastern Wormsnake
Page #	10
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Rough Earthsnake
Page #	16
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Smooth Earthsnake
Page #	17
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Rough Greensnake
Page #	18
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Smooth Greensnake
Page #	19
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Ribbonsnake
Page #	20
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Gartersnake
Page #	21
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Scarletsnake
Page #	22
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Eastern Milk Snake
Page #	24
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Red Cornsnake
Page #	29
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Scarlet Kingsnake
Page #	23
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Eastern Kingsnake
Page #	26
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Eastern Black Kingsnake
Page #	27
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Mole Kingsnake
Page #	28
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Eastern Ratsnake
Page #	30
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Northern Black Racer
Page #	31
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Eastern Mudsnake
Page #	34
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Common Rainbow Snake
Page #	35
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Northern Watersnake
Page #	40
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Glossy Swampsnake
Page #	36
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Brown Watersnake
Page #	39
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Plain Bellied Watersnake
Page #	38
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Queensnake
Page #	37
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Northern Pine Snake
Page #	32
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Eastern Hog Nosed Snake
Page #	33
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Copperhead
Page #	43
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Cottonmouth
Page #	42
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.

Snake	Timber Rattlesnake
Page #	44
Pattern	
Identification	
Habitat	
Diet or an	
interesting fact	
Length	
	Draw the snake and its length.