

The Wealth of Illinois

Grade Level: 4-8

Lesson Overview

Who decides which birds, mammals, and other items become our state symbols? In this lesson, students will learn how a bill becomes a law as they dig into the establishment of our state soil.

Student Objectives

1. Identify the state symbols of Illinois.
2. Identify the geographic location of Illinois counties.
3. Explain the process of how a bill becomes a law.
4. Determine the chronological order of state symbols of Illinois.
5. Create a flow chart.

Materials

- ✓ Illinois State Symbols teacher information sheet
- ✓ The Wealth of Illinois worksheet
- ✓ Drummer Silty Clay Loam information sheet
- ✓ Drummer Silty Clay Loam worksheet
- ✓ How a Bill becomes a Law worksheet
- ✓ Drummer Silty Clay Loam Map of Illinois
- ✓ <https://www2.illinois.gov/dnr/education/Pages/ILStateSymbols.aspx>
- ✓ <http://www.ilga.gov/commission/lru/HowBillBecomesLaw2016.pdf>

Background Information

All states have official symbols to represent important aspects of their state. The official state symbols of Illinois are designated by the General Assembly. People across the state have helped decide some of these symbols. Some were chosen based on the efforts of students. Naming the state soil helps to recognize the rich, fertile soil that adds to the wealth of Illinois.

Procedure

1. Using <https://www2.illinois.gov/dnr/education/Pages/ILStateSymbols.aspx> and Illinois State Soil: How it All Got Started student information sheet - students will complete The Wealth of Illinois student worksheet.

2. Using the <http://www.ilga.gov/commission/lru/HowBillBecomesLaw2016.pdf> and the Illinois State Soil: How it All Got Started student information sheet students will complete the following worksheets: Drummer silty clay loam and How a Bill becomes a Law.

Extension Activities

1. Ask students if they could choose a new symbol, what would you choose and why.
2. Ask students to think about what symbols they would choose to represent their lives. Each student could make a paper quilt block with his/her own symbols represented. Then the quilt blocks could be pieced together to make a class quilt. Another option would be for students to represent them on a flag they design to be shared or displayed. Note this activity would coordinate with the Flags are Symbolic lesson.

Additional Resources

- Illinois History Interactive Ag Mag from Illinois Agriculture in the Classroom
http://www.agintheclassroom.org/TeacherResources/AgMags/Illinois%20Bicentennial%20Ag%20Mag%202018_For%20WEB.pdf

Standards

Illinois Social Science Standards

SS.G.1.6-8.LC. Use geographic representations^[SEP] (maps, photographs, satellite images, etc.) to explain relationships between the locations (places and regions) and changes in their environment.

SS.G.1.6-8.MdC. Use mapping and graphing to^[SEP] represent and analyze spatial patterns of different environmental and cultural characteristics.

SS.CV.2.6-8.MdC. Explain the origins, functions,^[SEP] and structure of government with reference to the U.S. Constitution, Illinois Constitution, and other systems of government.

Illinois English Language Arts Standards

CCRA.R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

RH.6-8.3 Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered).

The **M**ultidisciplinary **A**gricultural **I**ntegrated **C**urriculum (mAGic) was created in 2004 under the leadership of the Illinois State Board of Education (ISBE) and the Facilitating Coordination in Agricultural Education Project (FCAE). Funding was made available through the FCAE grant budget from the agricultural education line item of the ISBE budget. This revision, as printed, was developed in January 2021.



These mAGic lessons are designed to bring agriculture to life in your classroom. They address the Illinois Learning Standards in math, science, English language arts and social studies.

Illinois mAGic project update writers/reviewers: Rhodora Collins – Dekalb County; Suzi Myers – Kane County; Connie Niemann – Montgomery County; Debbie Ruff – Livingston County; Jennifer Waters – Sangamon County; Dawn Weinberg – Hancock County; and Carrie Winkelmann – Menard County.

Illinois State Symbols Teacher Information Sheet

| Designation | Symbol | Year adopted |
|---------------|--|--------------|
| Amphibian | Eastern tiger salamander (<i>Ambystoma tigrinum</i>) | 2005 |
| Animal | White-tailed deer (<i>Odocoileus virginianus</i>) | 1982 |
| Artifact | Pirogue | 2016 |
| Bird | Northern cardinal (<i>Cardinalis cardinalis</i>) | 1929 |
| Dance | Square dance | 1990 |
| Exercise | Cycling | 2017 |
| Fish | Bluegill (<i>Lepomis macrochirus</i>) | 1986 |
| Flower | Violet (<i>Viola sororia</i>) | 1908 |
| Fruit | Gold Rush Apple (<i>Malus domestica</i>) | 2007 |
| Fossil | Tully monster (<i>Tullimonstrum gregarium</i>) | 1989 |
| Grain | Corn (<i>Zea mays L.</i>) | 2018 |
| Insect | Monarch butterfly (<i>Danaus plexippus</i>) | 1975 |
| Microbe | <i>Penicillium rubens</i> strain NRRL 1951 | 2021 |
| Mineral | Fluorite (<i>Calcium fluoride</i>) | 1965 |
| Pet | Shelter dogs & cats | 2017 |
| Pie | Pumpkin (<i>Cucurbita pepo</i>) | 2015 |
| Prairie grass | Big bluestem (<i>Andropogon gerardii</i>) | 1989 |
| Reptile | Painted turtle (<i>Chrysemys picta</i>) | 2005 |
| Slogan | Land of Lincoln | 1955 |
| Snack food | Popcorn (<i>Zea mays averta</i>) | 2003 |
| Soil | Drummer silty clay loam (<i>mesic Typic Endoaquoll</i>) | 2001 |
| Song | "Illinois" words by C.H. Chamberlain, music by Archibald Johnson | 1925 |
| Tartan | IL Saint Andrew Society Tartan | 2012 |
| Tree | White oak (<i>Quercus alba</i>) | 1973 |
| Vegetable | Sweet Corn | 2015 |

Name _____

Wealth of Illinois Worksheet

In each blank next to the state symbols write the year they became the official symbol of Illinois. Place below each photo which state symbol they represent.

Example: 1925 State Song – Illinois

- _____ State Soil - Drummer silty clay loam
- _____ State Flower - Violet
- _____ State Bird - Cardinal
- _____ State Animal - White-tailed Deer
- _____ State Reptile - Painted Turtle
- _____ State Snack - Popcorn
- _____ State Tree - White Oak
- _____ State Pet - Sheltered Dogs & Cats
- _____ State Fish - Bluegill
- _____ State Slogan - Land of Lincoln
- _____ State Mineral - Fluorite
- _____ State Exercise - Cycling

- _____ State Insect - Monarch Butterfly
- _____ State Grain - Corn
- _____ State Prairie Grass - Big Bluestem
- _____ State Vegetable - Sweet Corn
- _____ State Fossil - Tully Monster
- _____ State Artifact - Pirogue
- _____ State Dance - Square Dance
- _____ State Fruit – Gold Rush Apple
- _____ State Pie – Pumpkin
- _____ State Tartan - IL St. Andrew Society Tartan
- _____ State Microbe - Penicillium rubens
- _____ State Amphibian - Eastern Tiger Salamander







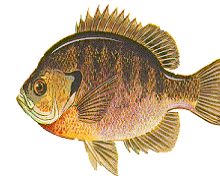


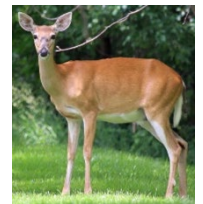






















Wealth of Illinois ANSWER KEY

In each blank next to the state symbols write the year they became the official symbol of Illinois. Place below each photo which State symbol they represent.

Example: 1925 State Song – Illinois

- | | |
|--|---|
| 2001 State Soil - Drummer silty clay loam | 1975 State Insect - Monarch Butterfly |
| 1908 State Flower - Violet | 2018 State Grain - Corn |
| 1929 State Bird - Cardinal | 1989 State Prairie Grass - Big Bluestem |
| 1982 State Animal - White-tailed Deer | 2015 State Vegetable - Sweet Corn |
| 2005 State Reptile - Painted Turtle | 1989 State Fossil - Tully Monster |
| 2003 State Snack - Popcorn | 2016 State Artifact - Pirogue |
| 1973 State Tree - White Oak | 1990 State Dance - Square Dance |
| 2017 State Pet – Sheltered Dogs & Cats | 2007 State Fruit - Gold Rush Apple |
| 1986 State Fish - Bluegill | 2015 State Pie - Pumpkin |
| 1955 State Slogan - Land of Lincoln | 2012 State Tartan - IL St. Andrew Society Tartan |
| 1965 State Mineral – Fluorite | 2021 State Microbe - Penicillium rubens |
| 2017 State Exercise - Cycling | 2005 State Amphibian - Eastern Tiger Salamander |



State Tree



State Snack



State Bird



State Fruit



State Prairie Grass



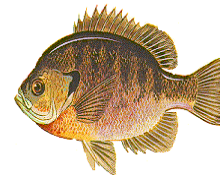
State Insect



State Flower



State Dance



State Fish



State Animal



State Vegetable



State Soil



State Reptile



State Amphibian



State Pie

Drummer Silty Clay Loam Information Sheet

Illinois State Soil: How it All Got Started

By Paige Buck, NRCS State Public Affairs Specialist, Champaign, IL. Additions and revisions made in 2006 by the mAGic Kit writing team.

Every state has a number of symbols or icons that represent significant events, resources, or historical references that deserve mention. Illinois is no different. We have a State Tree: the white oak. Illinois also has a State flower, bird, mineral, insect, fish, and host of other symbols. Illinois also has a State Flag and a State Seal, created back in 1868. The state tree and flower were designated in 1908. The State Bird became official in 1929. Illinois coined the State Slogan, "Land of Lincoln" in 1955. In 1965, Illinois unveiled the State Mineral, Fluorite. Then in 1975 the Monarch Butterfly was deemed our State Insect. The State Animal and State Fish were sanctioned in 1982 and 1986, respectively. And as recently as 1989, Big Bluestem was selected as the State Prairie Grass to represent Illinois as the "Prairie State."

It isn't hard to understand why these items were selected so long ago and honored in order to represent the special and unique character of our state. Oak trees are plentiful, beautiful, and stand the test of time. Violets, Northern Cardinals, White-Tailed Deer, Bluegill, and Big Bluestem are natural resources easily spotted on the landscape. These plants and animals are part of the history of our state, and in a sense, they become part of the history of each citizen.

Did you also know that Illinois has a State Dance, a State Song, a State Snack and even a State Fossil? The State Dance is the square dance, the State Song is called "Illinois," the State Snack is Popcorn and the State Fossil is the "Tully Monster," a soft-bodied carnivore or monster that swam around in the ocean approximately 300 million years ago.

In August 2001, Governor George Ryan signed House Bill 605, which officially declared Drummer silty clay loam the official State Soil. "Our hope was that by declaring soil as a state symbol, we could successfully raise awareness and help people make the connection between the success and the beauty of our state and the soil resources that make it all possible," says NRCS State Soil Scientist, Bob McLeese.

"To date, seventeen other states have established state soils," explains McLeese. "Because we have rich, fertile, and productive soils, it was important that Illinois recognize this resource which has linked farmers and non-farmers to so many successes," adds McLeese.

How It All Began...

The push for Illinois' State Soil began back in 1985 when the Illinois Soil Classifiers Association (ISCA), a non-profit group comprised of professional soil scientists, appointed a committee to nominate one soil for this prestigious title. This might sound like a simple task, but it's not when you realize that nearly 700 different soil types have been identified in Illinois, each with unique properties and characteristics and each with its own argument for consideration as THE state soil.

Caught in the middle of a "dirty" battle, the committee first identified criteria which required that the soil be connected in some way to prairie vegetation, have high agricultural productivity, have an extensive presence on the land, be original and unique to the state, and be recognized and supported by private landowners.

In 1987, ISCA members voted, and Drummer silty clay loam won by a 2 to 1 margin. "Although ISCA had a winner, we learned that most other state symbols were ultimately selected by school children," says Past ISCA President, Karla Hanson. In order to involve school children and validate the chosen soil, various elections were sponsored over the next few years by organizations such as FFA, an intra-curricular organization that applies the concepts learned in the agricultural education courses, the 4-H Youth Conference, and the Illinois Association of Vocational Agricultural Teachers. Drummer silty clay loam won nearly every election.

Drummer silty clay loam is a rich, fertile prairie soil. Drummer is one of the most fertile and productive soils in the world. The topsoil of Drummer silty clay loam is about 16 inches deep and is very dark brown to black in color. One reason for the large layer of topsoil and dark color is the prairie vegetation that grew about it. As deep roots from the prairie grasses dies and decomposed, they left behind nutrients and organic matter in the soil. Drummer soils are the most extensive soils in Illinois. They occur on more than 1.5 million acres in

the state. They are the most productive soils in the state. Corn and soybeans are the principal crops.

“We feel comfortable with Drummer. It’s a highly productive prairie soil and it was first mapped and classified in Ford County back in 1929, so it’s been around for a long time,” explains Hanson. It was named for Drummer Creek in Drummer Township. It consists of very deep, poorly drained soils that formed in 40 to 60 inches of loess or other silty material and in the underlying stratified, loamy glacial drift. These soils formed under prairie vegetation. Drummer is also well known among the farming population. “Drummer soils cover about 1.5 million acres in nearly half of Illinois’ 102 counties,” adds Hanson.

How To Make it Law...

By 1993, Drummer was it. But the idea had to be “sold”—the concept needed a political sponsor and enough support to turn it into a bill that legislators could vote on and make into law. The ISCA went to work to publicize the need for and the value of a State Soil. Then an eager and energetic group of high school students from Monticello, IL decided to take on the state soil challenge. The students of Mindy Elvidge’s Agricultural Science class, also members of the Monticello FFA Chapter, rolled up their sleeves and went to work.

For three years, these students made phone calls and contacted other Illinois FFA Chapters as well as local and state congressional representatives to garner support, enthusiasm, and a better understanding of soils issues. They conducted a letter-writing campaign, wrote letters to newspaper editors, and flooded local media with facts, editorials, proposals, and information about the value and need for an increased appreciation of soil.

McLeese knew firsthand what the FFA students were up against. “Getting the attention of Illinois legislative representatives was a challenge. Voting members are only allowed a certain number of bill proposals, so we knew finding a representative willing to “donate” one-third of their legacy bills in the name of soil would be difficult,” explains McLeese.

“Another complication was that more than half of Illinois’ representatives cover urban communities in northeastern Illinois. Getting urban legislators to understand, appreciate, or value soil was a struggle,” adds Hanson.

In order to appeal to urban representatives, Monticello’s “rural” FFA class joined forces with Chicago High School for Agricultural Sciences’ “urban” FFA. With the shared task, and a new formidable force on the urban front, the idea was headed for success. Over the long struggle, many Illinois State Representatives served as sponsors and played a role in this initiative—Julie Curry (D-Mt. Zion), Ray Poe (R-Springfield), Tom Dart (D-Chicago), and Senator Duane Noland (R-Blue Mound).

After three years of letter writing, lobbying, and testifying in front of the Illinois General Assembly, a dedicated group of high school students finally witnessed as House Bill 605 passed the Illinois House of Representatives on March 22, 2001 with a vote of 113 - 0. The group testified one last time on April 24 in front of the Senate Agriculture Committee. The bill passed the full Senate on May 9, 2001 by a 54-0 vote. Elvidge remembers the excitement when the final votes were tallied. “The room was filled with FFA students and when the votes were in, they all cheered and went crazy!”

“We are excited to have played a key role in getting this legislation passed,” adds Elvidge. “My students worked long and hard for this. They know more about soil than I ever thought possible, they demonstrated such passion and a commitment to this mission, and they’ve learned a great deal about the legislative process, which will make them powerful citizens,” says Elvidge. “And for my FFA Officers who were graduating seniors, this was the best graduation present they could ever have.”

“The legislation was a huge milestone for the FFA students, the Chicago Ag High School, and for anyone committed to the protection of natural resources in Illinois,” says Gradle. “By signing this bill into law, Illinois and all her citizens will better recognize how crucial soil is to our state’s history, our quality of life, and our future. This is just the beginning of a new commitment to soil.”

“Nearly 100 years ago, our ancestors felt a responsibility to acknowledge the white oak and the violets that graced this land. By declaring a state soil, we acknowledge that without the soil as a foundation, these other resources and symbols would not even exist,” says Gradle.

Name _____

Drummer Silty Clay Loam Worksheet

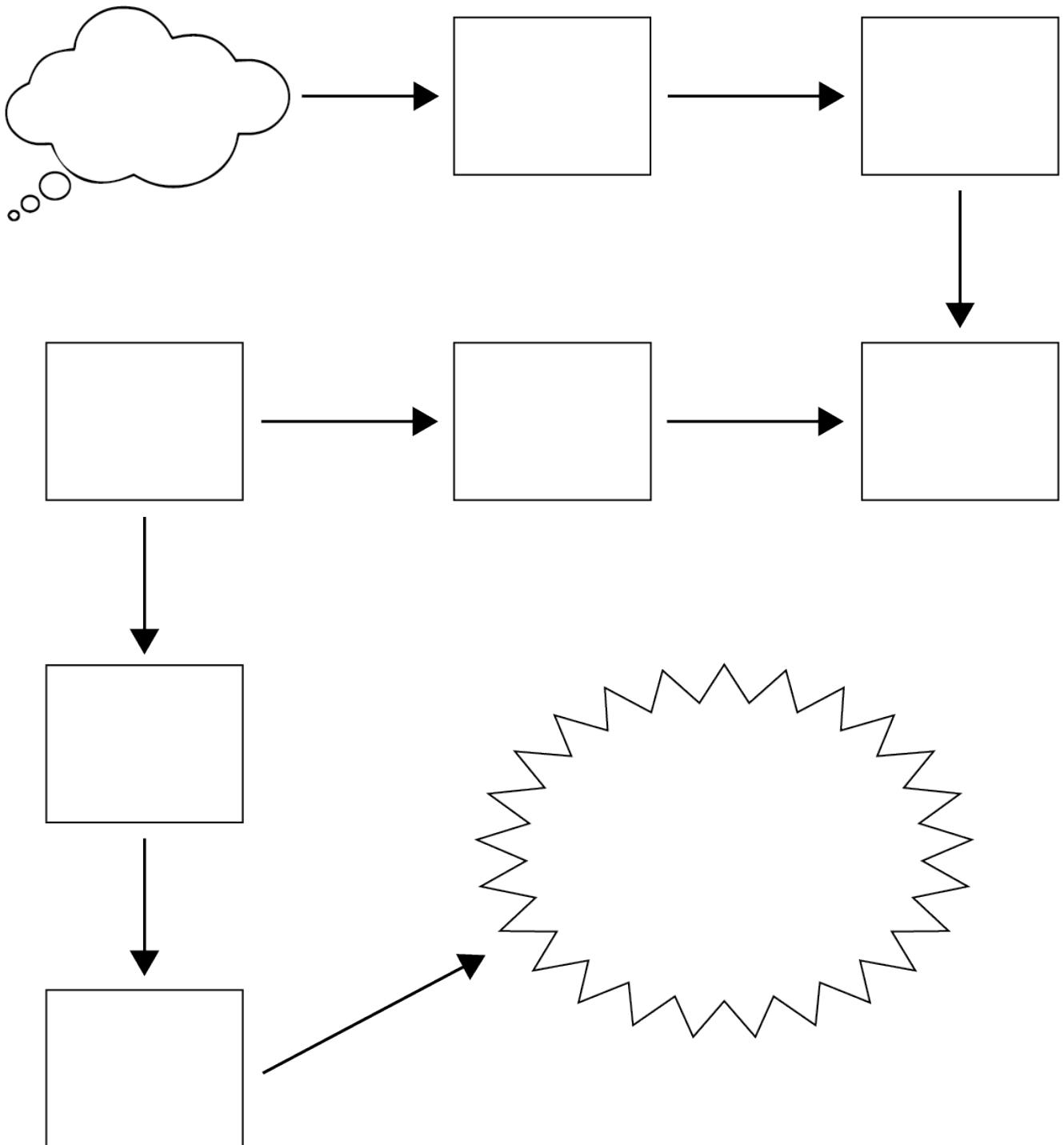
1. What is the official State Soil of Illinois?
2. Why is it important that Illinois recognize an official state soil?
3. What does ISCA stand for? What role did it have in naming the state soil?
4. How many soil types have been identified in Illinois?
5. What are two reasons why Drummer Silty Clay Loam was elected?
6. What groups voted on which soil should be named the official state soil?
7. Drummer Silty Clay Loam covers how many acres of soil in Illinois?
8. What did the students from the Monticello FFA chapter and the Chicago High School for Agricultural Sciences do to help establish the official state soil?
9. What was the House Bill number on the state soil bill? When did the House vote on the state soil bill? What was the house vote on the state soil?
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11. When did the Senate vote on the state soil? What was the Senate vote on the state soil?
12. What Governor signed it into law and when?

Drummer Silty Clay Loam ANSWER KEY

1. What is the official State Soil of Illinois?
Drummer Silty Clay Loam
2. Why is it important that Illinois recognize an official state soil?
Because we have rich, fertile, and productive soils, it was important that Illinois recognize this resource which has linked farmers and non-farmers to so many successes.
3. What does ISCA stand for? What role did it have in naming the state soil?
Illinois Soil Classifiers Association. They appointed a committee to nominate one soil, identified the criteria for the state soil, and voted Drummer Silty Clay Loam by a 2 to 1 margin.
4. How many soil types have been identified in Illinois?
Nearly 700 different soil types have been identified in Illinois.
5. What are two reasons why Drummer Silty Clay Loam was elected?
**Drummer Silty Clay Loam is rich and fertile.
Drummer Silty Clay Loam is one of the most productive soils in Illinois.
Drummer Silty Clay Loam is one of the most extensive soils in Illinois.
Drummer Silty Clay Loam formed under prairie vegetation.
Corn and soybeans are the principal crops of this soil.**
6. What groups voted on which soil should be named the official state soil?
FFA members, 4-H Youth Conference, Illinois Association of Vocational Agriculture Teachers.
7. Drummer Silty Clay Loam covers how many acres of soil in Illinois?
Drummer occurs on more than 1.5 million acres in the state.
8. What did the students from the Monticello FFA chapter and the Chicago High School for Agricultural Sciences do to help establish the official state soil?
They conducted a letter-writing campaign, wrote letters to newspaper editors, and flooded local media with facts, editorials, proposals, and information about the value and need for increased appreciation of soil. They lobbied the House and Senate and provided testimony in support of Drummer soil.
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House Bill 605
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The bill passed the full Senate on May 9, 2001 by a 54-0 vote.
12. What Governor signed it into law and when?
August 2001, Governor George Ryan signed House Bill 605, which officially declared Drummer Silty Clay Loam the official State Soil of Illinois.

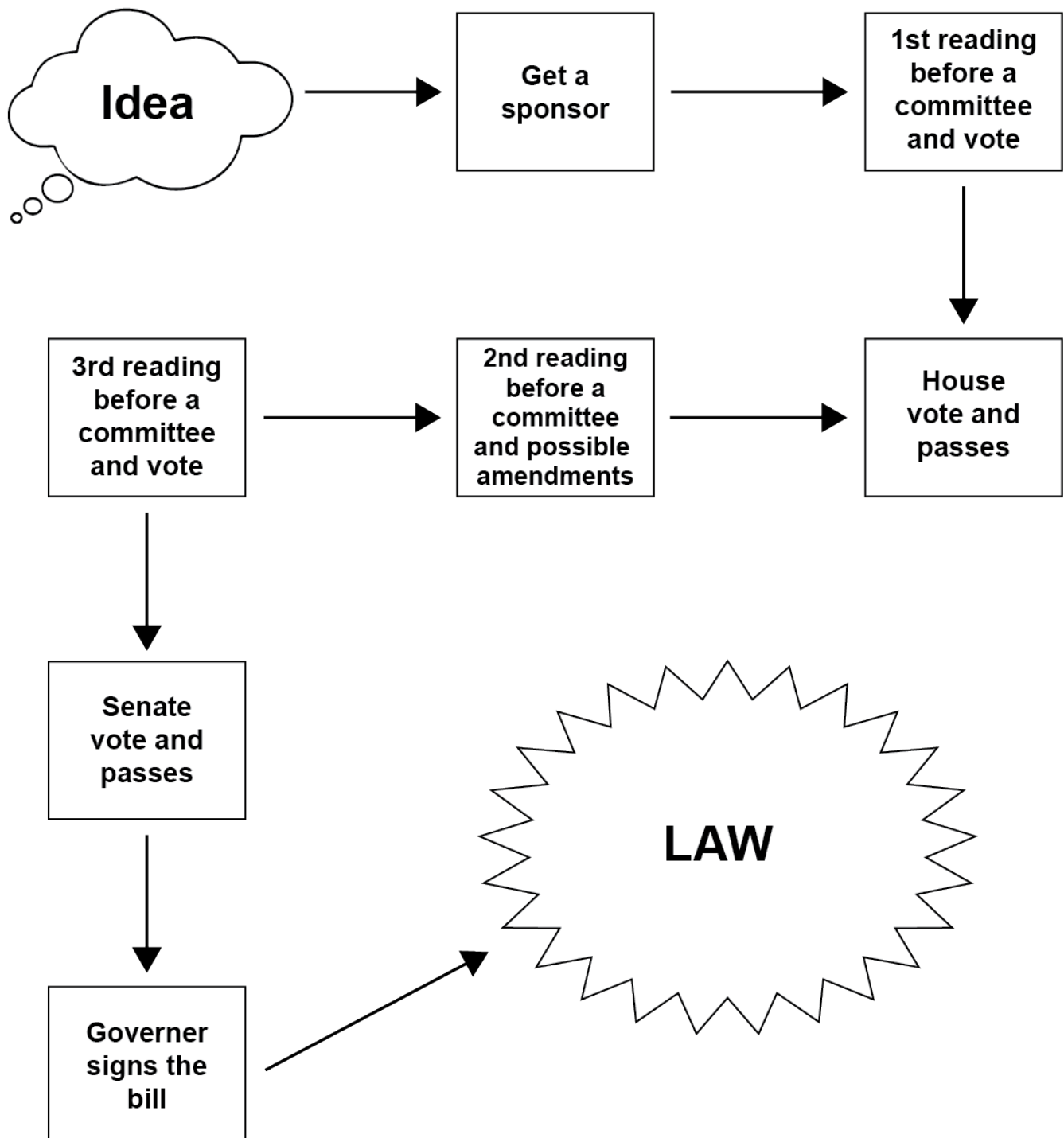
How a Bill Becomes a Law Worksheet

After reading the Drummer Silty Clay Loam Information Sheet and investigating on the following websites: https://www.ilga.gov/commission/lis/98bill_law.pdf, <http://www.leginfo.ca.gov/bil2lawd.html>, <https://www.illinoisenatedemocrats.com/resources/for-educators/15-information/34-how-a-bill-becomes-law>, create a flow chart on how an idea can be made into a law.



How a Bill Becomes a Law ANSWER KEY

After reading the Drummer Silty Clay Loam Information Sheet and investigating on the following websites: https://www.ilga.gov/commission/lis/98bill_law.pdf, <http://www.leginfo.ca.gov/bil2lawd.html>, <https://www.illinoisenatedemocrats.com/resources/for-educators/15-information/34-how-a-bill-becomes-law>, create a flow chart on how an idea can be made into a law.



Drummer Silty Clay Loam Map of Illinois

