

Endangered Species



MATH

Grades: 3-5

Objective: The students will analyze graphs to answer specific questions and look for trends in graphed results.

What's Inside?

- Lesson Plan
- Student Handout
- US Fish & Wildlife charts

Sources: Education World

Lesson Plan

Resource from Educator World

Most students will eagerly agree that endangered species need help and attention, but they often do not have a true understanding of the depth of the problem. In this activity, children use their math skills to interpret data from reputable sources and size up the current status of the endangered species of our nation and the world.

Start this lesson with a brief discussion of endangered species. Ask your students to share what they know about the number of endangered species in our nation and the world. Explain that they are about to examine some current data to find out just how many endangered species have been identified. Remind them that these are the animals and plants that are known to be in trouble. Many others probably exist.

Distribute copies of the Tracking the Wild Ones work sheet and the US Fish & Wildlife charts. When students have completed the handout, correct the answers as a group and talk about the large numbers of endangered species found in the United States. Were the students surprised to find that there are more listed species in this country than in the foreign countries? How might that be explained?

National Standards

MATHEMATICS: Number and Operations

GRADES 3 - 5NM-NUM.3-5.3 Compute Fluently and Make Reasonable Estimates

MATHEMATICS: Data Analysis and Probability

GRADES 3 - 5

NM-DATA.3-5.2 Select and Use Appropriate Statistical Methods to Analyze Data

SCIENCE, GRADES K - 4

NS.K-4.3 Life Science

Name _____



Tracking the Wild Ones

DIRECTIONS: Use information from the graphs to answer the following questions about endangered species.

1. Did the number of listed endangered and threatened species grow or decline during the period of 1990-2015?
2. How many more endangered and threatened species were listed by the Fish and Wildlife Service in 2015 than in 1990?
3. In 2022, are more plants or animals in the world listed as endangered or threatened? How many more? (Note: An animal is any creature that can breathe and move about. So, insects and clams are animals.)
4. What is the current total of threatened and endangered species in the United States?
5. How many U.S. fish are listed as endangered or threatened today?
6. Which group of animals has the smallest number of species in danger of extinction on the current U.S. list? How many total species of this type are endangered or threatened?
7. Which plant group -- flowering plants, conifers, ferns, or lichens -- has the smallest number of total species on the U.S. endangered or threatened species lists?
8. How many more U.S. species than foreign ones are listed as threatened or endangered on the current list?



NUMBER OF SPECIES PER YEAR

RESOURCE FROM US FISH & WILDLIFE SERVICE

Calendar Year	Number of Species Listings
<u>2022</u>	1
<u>2021</u>	0
<u>2020</u>	0
<u>2019</u>	4
<u>2018</u>	5
<u>2017</u>	9
<u>2016</u>	73
<u>2015</u>	27
<u>2014</u>	36
<u>2013</u>	83
<u>2012</u>	44
<u>2011</u>	11
<u>2010</u>	54
<u>2009</u>	6
<u>2008</u>	2
<u>2007</u>	0
<u>2006</u>	12
<u>2005</u>	7
<u>2004</u>	8

<u>2003</u>	2
<u>2002</u>	11
<u>2001</u>	10
<u>2000</u>	40
<u>1999</u>	23
<u>1998</u>	56
<u>1997</u>	78
<u>1996</u>	91
<u>1995</u>	18
<u>1994</u>	128
<u>1993</u>	67
<u>1992</u>	79
<u>1991</u>	80
<u>1990</u>	38
<u>1989</u>	32
<u>1988</u>	47
<u>1987</u>	60
<u>1986</u>	36
<u>1985</u>	59
<u>1984</u>	32
<u>1983</u>	7
<u>1982</u>	11

<u>1981</u>	4
<u>1980</u>	16
<u>1979</u>	37
<u>1978</u>	42
<u>1977</u>	21
<u>1976</u>	35
<u>1975</u>	11
<u>1974</u>	0
<u>1973</u>	7
<u>1972</u>	3
<u>1971</u>	0
<u>1970</u>	44
<u>1969</u>	0
<u>1968</u>	0
<u>1967</u>	70



2022 LIST OF SPECIES

RESOURCE FROM US FISH & WILDLIFE SERVICE

Group	United States			Foreign			Total Listings (US and Foreign)	US Listings with active Recovery Plans
	Endangered	Threatened	Total Listings	Endangered	Threatened	Total Listings		
Amphibians	23	16	39	8	1	9	48	27
Annelid Worms	0	0	0	0	0	0	0	0
Arachnids	12	0	12	5	0	5	17	12
Birds	76	23	99	217	21	238	337	91
Clams	77	16	93	2	0	2	95	74
Corals	0	7	7	3	15	18	25	0
Crustaceans	25	5	30	0	0	0	30	21
Fishes	94	77	171	27	9	36	207	107
Flatworms and Roundworms	0	0	0	0	0	0	0	0
Hydroids	0	0	0	0	0	0	0	0
Insects	75	15	90	4	0	4	94	64
Mammals	66	30	96	261	23	284	380	63
Millipedes	0	0	0	0	0	0	0	0
Reptiles	17	29	46	70	24	94	140	40
Snails	38	13	51	1	1	2	53	37
Sponges	0	0	0	0	0	0	0	0
Animal Totals	503	231	734	598	94	692	1426	536
Plant Totals	769	172	941	1	2	3	944	807
Grand Totals	1272	403	1675	599	96	695	2370	1343