



What is the Great Lakes Triangle?

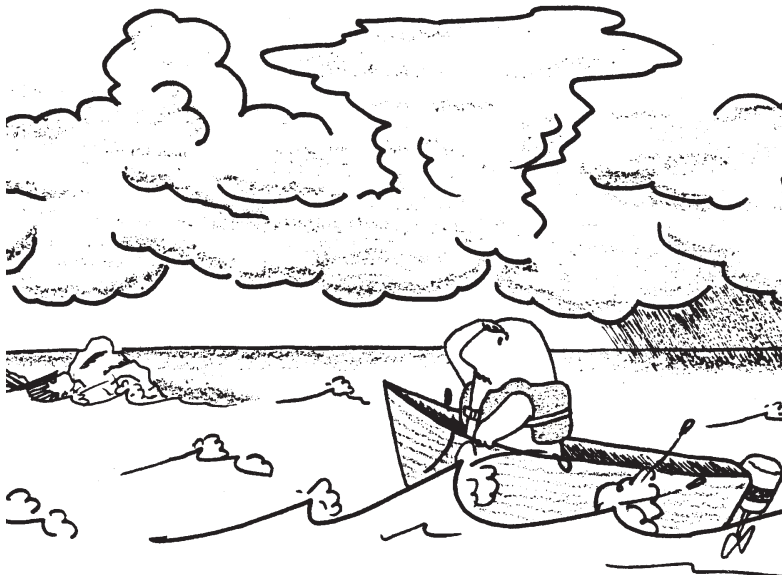
In 1974, Charles Berlitz wrote in his famous best seller, *The Bermuda Triangle*:

There is a section of the western Atlantic, off the southeast coast of the United States, forming what has been termed a triangle, extending from Bermuda in the north to southern Florida, and then east to a point through the Bahamas past Puerto Rico to about 40 degrees west longitude and then back again to Bermuda. This area occupies a disturbing and almost unbelievable place in the world's catalogue of unexplained mysteries. This is usually referred to as the Bermuda Triangle, where more than 1,000 lives have been lost in the past 26 years, without a single body or even a piece of wreckage from the vanishing planes or ships having been found.

Former aviator Jay Gourley has since written a book called *The Great Lakes Triangle* (1977), which claims that the Great Lakes account for more unexplained disappearances per unit area than the Bermuda Triangle. This is no small comparison, considering that the Bermuda Triangle is 16 times larger than the Great Lakes area. Gourley says:

Because of the irregular shape of the Great Lakes, pilots — aware of the dangers within — ordinarily circumnavigate the lakes, even when overflying might be shorter. It is almost impossible for even the slowest aircraft to be more than 20 minutes from land. Today's airliner can cross Lake Erie through the middle in ten minutes. Faster aircraft can do it in much less than four minutes. Over any point on any of the Great Lakes it is possible for the pilot of any jet airliner to shut down all his engines and literally glide to land. There are hundreds of ground-based, sea-based and air-based radios constantly monitoring emergency frequencies for any sign of trouble.

Aware of the curious incidents over the Great Lakes, the Federal Aviation Administration several years ago instituted a special "Lake Reporting Service;" pilots on Great Lakes overflights make continuous reports to ground stations. A 10-minute delay in such a report automatically launches a search-and-rescue operation. This service has saved many lives that would have been lost to ordinary accidents, but the high incidence of inexplicable disasters has remained unaffected.



Source

Activity A of OEAGLS EP-17, *The Great Lakes Triangle*, by Rosanne W. Fortner and Daniel W. Jax.

Earth Systems Understandings

This activity focuses on ESU 3, analysis of data and scientific habits of mind.

References

Berlitz, Charles. *The Bermuda Triangle*. New York: Doubleday and Company, 1974.

Gourley, Jay. *The Great Lakes Triangle*. New York: Aaron M. Priest, Inc., 1977.

Materials

Figure 1 and Table 1

Note:

Table 1 lists the disappearances or wrecks of ships and planes that are plotted in Figure 2. If students use only the figure, post the table where they can refer to it.

Answers

1. Areas with many disappearances include eastern Lake Superior, western Lake Erie, and areas around Milwaukee and Chicago.
2. Allow for guessing: the areas in Lake Michigan are around busy airports. Eastern Lake Superior has a narrow approach route into the St. Mary's River.
3. Accept all answers at this point. The idea here is to convince students that there are many science questions that require several hypotheses to be investigated at once. The interesting questions raised here are investigated in the next activity.

OBJECTIVE

When you have completed this activity you will be able to:

- Demonstrate an ability to perceive patterns in a set of data.
- Explain how scientific habits of mind should include the seeking of logical explanations for "mysterious" happenings.

PROCEDURE

Figure 2 shows the approximate last position of disappearing ships and planes in the area of the Great Lakes Triangle. Look at the map symbols and their locations to answer the questions about the map.

1. Are there some areas where large numbers of losses have occurred? Where?
2. What are some possible logical explanations for large numbers of losses having occurred at these particular areas?
3. Why do you think some of the planes, ships, and people were never found?

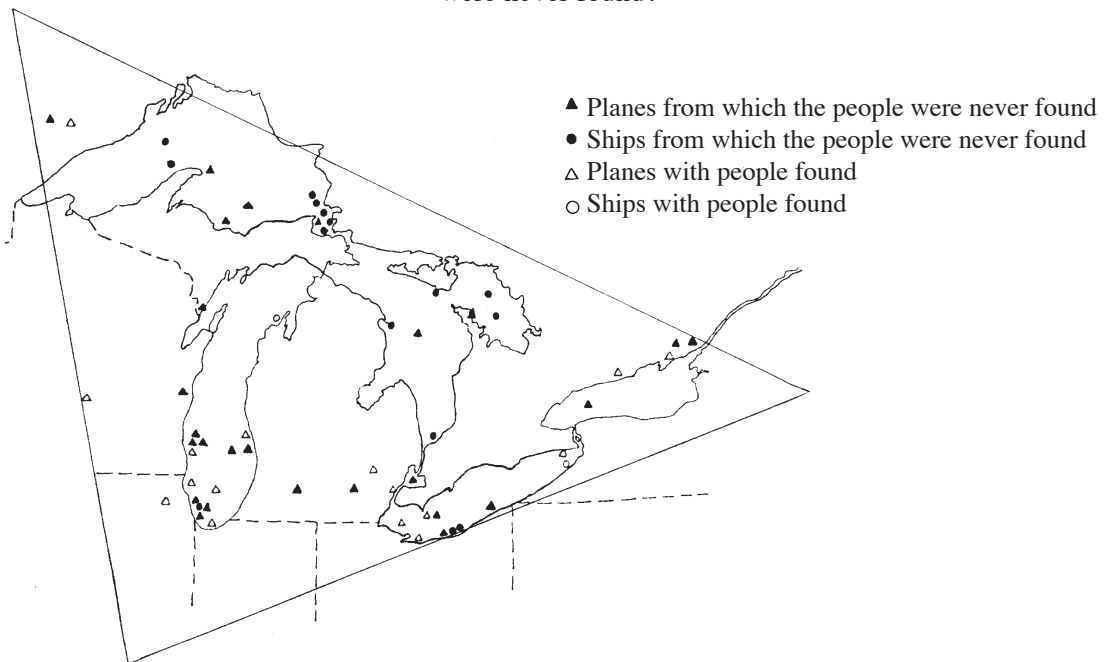


Figure 1. Estimated locations of disappearances described in Gourley's *The Great Lakes Triangle*.

Table 1. GREAT LAKES TRIANGLE DISAPPEARANCES

Date:	Craft	Location at Time of Disappearance	People Missing
10/28/1892	<i>Ostrich</i> wooden schooner	Off Manitou Island, Lake Superior	all
10/28/1892	<i>W.H. Gilcher</i> steel grain ship	West Straits of Mackinac, Lake Superior	all
8/20/1899	<i>Hunter Savidge</i> schooner	Lake Huron, near Alpena, Michigan	5
11/21/1902	<i>Bannockburn</i> small freighter	Middle of Lake Superior	all
10/09/07	<i>Cyprus</i> steel freighter	Off Coppermine Point, Lake Superior	all but 1
12/01/08	<i>D.M. Clemson</i> steamer	Lake Superior, near Soo Locks	all
11/12/13	<i>The Price</i> ship	Southern tip of Lake Huron	all (some bodies recovered)
11/26/13	<i>Rouse Simmons</i> schooner	Lake Michigan, just north of Chicago	17
11/24/18	<i>Inkerman</i> minesweeper	Lake Superior, near Soo Locks	all
11/24/18	<i>Cerisolles</i> minesweeper	Lake Superior, near Soo Locks	all
12/07/27	<i>Kamloops</i> steamer	Isle Royale	all
9/26/30	<i>Our Son</i> schooner	Straits of Manitou, Lake Michigan	0
11/21/36	<i>Hibou</i> passenger steamer	Georgian Bay	7
12/02/42	<i>Admiral</i> "a stout ship"	Lake Erie, 8 miles from Avon Point and 11 miles west of Cleveland	14
12/02/42	<i>Clevco</i> tanker barge	Lake Erie, 8 miles from Avon Point and 11 miles west of Cleveland	32 (some bodies recovered)
6/23/50	Northwest Airlines Flight 2501	70 miles east of South Haven, Michigan	58
12/18/50	<i>Sachem</i> tugboat	11 miles north of Dunkirk, New York	0
10/28/52	Small plane	35 miles northeast of Marquette, Michigan	4
11/28/52	CF-FUV Plane	Lake Superior, between Keweenaw Point and Whitefish Point	all
8/27/53	Jet	Over southern Lake Michigan	1
8/23/54	Twin jet interceptor	North shore of Lake Ontario, near Ajax, Ontario	0
6/8/55	Light plane	North of Lake Superior, between Kapuskasing and Kenora, Ontario	0
5/15/56	Canadian twin jet	Just northeast of Lake Ontario	all
8/2/56	CF-100	Bruce Peninsula, near Georgian Bay	2
12/8/56	Aero commander	North shore of Lake Erie, near Buffalo	0
5/21/59	Piper PA-18	Lake Superior, near Teggan Lake, Ontario	2
12/16/59	Aero Design 560E	Lake St. Clair	2
9/23/60	Cessna 140	Over Lake Michigan, just south of Milwaukee	0
9/27/60	Twin Jet interceptor	Lake Ontario	1
11/29/60	Piper plane	Lake Michigan, just off Chicago	3
3/26/61	Small plane	Wisconsin, just west of Lake Michigan	all

Table continues on next page

7/20/62	Light plane	Over western end of Lake Erie, between Alliance, Ohio, and Detroit, Michigan	0
2/12/63	Small plane	Over Niagara Falls	0
9/9/63	Light plane	Sandusky, Ohio	0
2/15/64	Twin engine plane	Western Basin, Lake Erie, between Detroit, Michigan, and Akron, Ohio	2
9/6/64	Twin engine Piper	Markham, Illinois	0
3/20/65	Cessna 170B	Lake Michigan, near Chicago	1
8/4/65	Mong sport plane	Lake Michigan	0
3/17/66	Twin engine Poper	Lake Huron, between Wiarton, Ontario, and Alpena, Michigan	1
12/19/66	Light plane	Over water between Cleveland, Ohio, and Erie, Pennsylvania	1
12/19/66	Cessna 172	Lake Erie, near Ashtabula	all
1/14/67	Plane	Lake Michigan, near Muskegon	3
12/10/67	Multi-engine Beech 18	Lake Monona, near Madison, Wisconsin	0
5/21/69	Beech 35	Northwest shore of Lake Michigan, near Menominee, Michigan	4
6/17/69	Piper PA-28	Lake Michigan, 15 miles east of Milwaukee	0
11/6/69	Twin turbojet	Lake Michigan, 15 miles east of Milwaukee	7
4/4/70	Beech 36	Lake Michigan, near Gary, Indiana	0
6/12/71	Cessna 180	10 miles north of Whitmore Lake, Michigan	0
7/21/72	Twin Piper PA-31	Lake Michigan, 15 miles east of Milwaukee	1
7/21/72	Piper plane	Lake Michigan, just off Milwaukee	1
11/30/72	Beech Expeditor	Lake Michigan, between Detroit and Milwaukee	1
12/4/72	Cessna 320	Eastern shore of Lake Michigan	0
12/7/72	Plane	Lake Michigan, between Milwaukee and Chicago	1
12/15/72	Lear jet	Just south of Detroit, Michigan	0
3/20/73	Beech F18S	Lake Erie, between Cleveland and Detroit	1
4/20/73	Lake Seaplane	Lake Erie, just east of Howell, Michigan	1
4/19/74	Helicopter	Near northeast shore of Lake Ontario between Ottawa and Greenville, Michigan	0
11/10/75	<i>Edmund Fitzgerald</i>	Lake Superior, off Coppermine Point	29
11/22/79	<i>Waubuno</i> steamer	Lake Huron, Georgian Bay	24
11/25/81	<i>Jane Miller</i> passenger steamer	Colpoys Bay, near Georgian Bay	28