

Use of Weather Data & Surveying for Insurance Catastrophe Operations



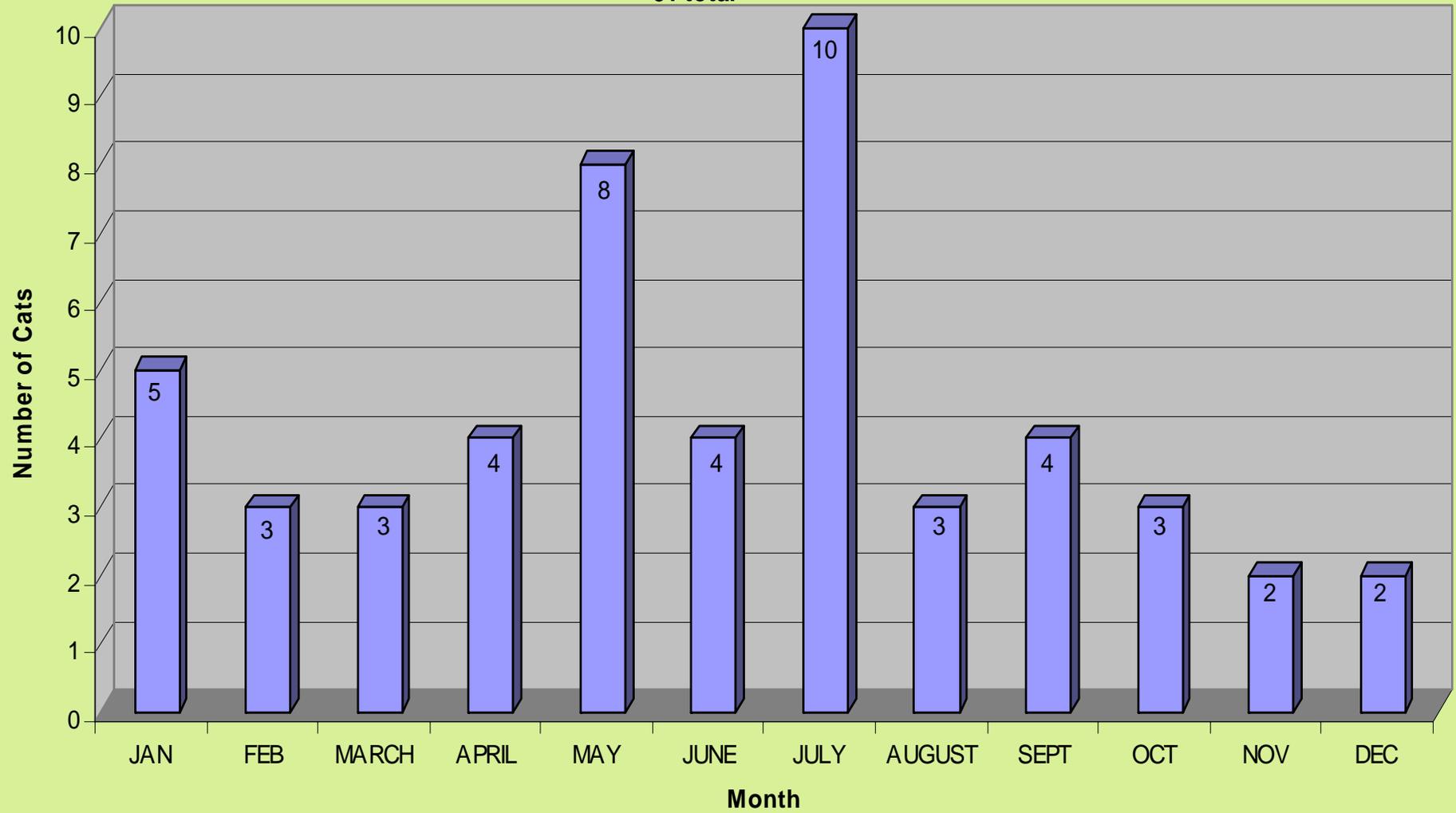
MICHIGAN CATASTROPHE CODES

CAT CODES	CAT DATES	CAUSES OF LOSS	LOCATION
B7	01/16 – 22/97	FREEZING/WATER	STATEWIDE
OU	03/13 – 14/97	FREEZING/LIGHTNING/WATER	ALL OF LOWER ½ OF LOWER PENINSULA
OY	04/05 – 07/97	WIND/LIGHTNING/WATER	ALL OF LOWER ½ OF LOWER PENINSULA
PQ	06/20 – 22/97	WIND/LIGHTNING/WATER	T--STORMS IN S.W. CORNER OF LOWER MI
PS	07/02 – 03/97	WIND/LIGHTNING/HAIL/WATER	LOWER MICHIGAN, MOSTLY METRO DETROIT
H7	10/26 – 27/97	SNOW/WATER	EARLY BLIZZARD, G.R., KZOO&LANSING
J5	02/17 – 18/98	SNOW/WATER/FLOOD	HEAVY RAIN 6”, METRO DETROIT
RN	05/29/98	WIND/HAIL	SEVERE THUNDERSTORM, MUSKEGON
RP	05/31/98	WIND/HAIL	HUGE FRONT, 100MPH WINDS, ALL LOWER MI
RX	06/24 – 26/98	WIND/HAIL	SEVERE T-STORMS, LOWER ½ OF LOWER MI
SD	07/20 – 22/98	WIND/HAIL/LIGHTNING	BIG STORM FRONT MOSTLY METRO DETROIT
M9	08/24 – 25/98	WIND/HAIL/LIGHTNING	SMALL CAT IN S.W. MICHIGAN, NILES AREA
SP	09/26 – 28/98	WIND/HAIL/LIGHTNING	TORNADO – GAYLORD
SV	11/10 – 11/98	WIND/LIGHTNING/WATER	GALES OF NOVEMBER, ENTIRE STATE
SX	12/06 – 07/98	WIND/LIGHTNING/WATER	LRG FRONT WITH 70MPH WINDS, DETROIT
TB	01/02 – 05/99	SNOW/WATER/ICE	BLIZZARD OF 99, 50” SNOW, LOWER MICHIGAN
TD	01/11 – 13/99	SNOW/WATER/ICE	ADD’L SNOW, SEVERE COLD, THEN ICE DAMS
UJ	05/17/99	WIND/LIGHTNING/HAIL	THUNDERSTORM FRONT, WEST MICHIGAN
UR	06/11 – 13/99	WIND/LIGHTNING/HAIL/WATER	T-STORM FRONT, MOSTLY METRO DETROIT
VE	07/23 – 25/99	WIND/LIGHTNING/HAIL/WATER	1 ST OF 10 DAY PERIOD OF SEVERE T-STORMS
VF	07/28 – 29/99	WIND/LIGHTNING/HAIL/WATER	SEE “VE”, GRAND RAPIDS - HAIL
VJ	07/31/99	WIND/LIGHTNING/HAILWATER	SEE “VE”

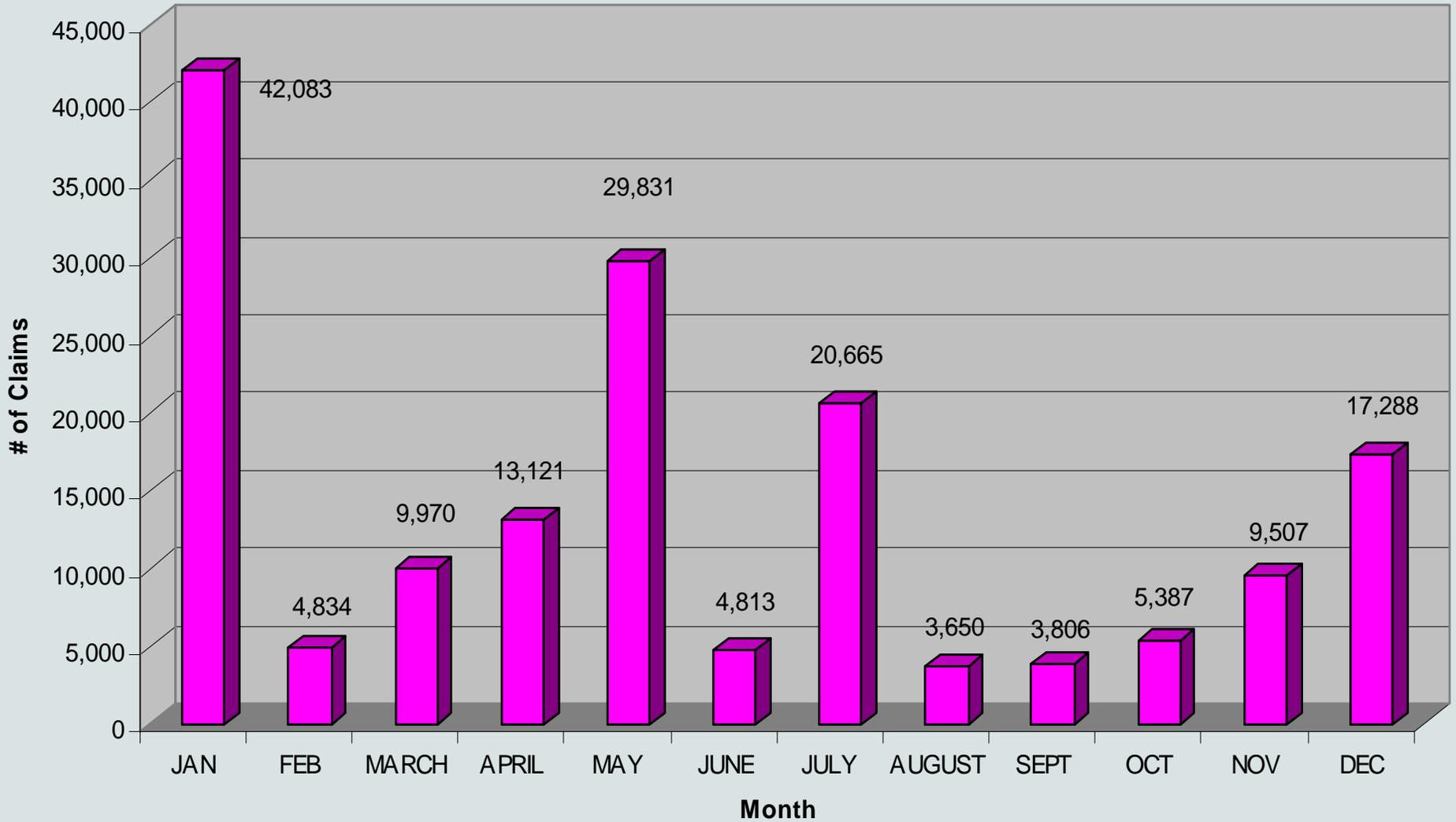
MICHIGAN FIRE CATS

PER MONTH 1997-2005

51 total



**MICHIGAN FIRE CAT
CLAIMS INCURRED PER MONTH 1997-2005**





Do Not
Open!

Insurance
Adjuster
INSIDE



National Weather Service Enhanced Radar Mosaic Loop

Central Great Lakes Sector

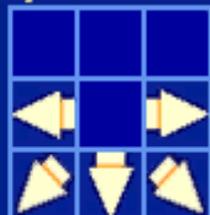
weather.gov



[Go to: Standard Version](#)

Local weather forecast by "City, St"

Adjacent Sectors:



Sectors

Northern U.S.

- Pac. Northwest Loop
- Mtn. Rockies Loop
- Upper Miss. Vly. Loop
- Great Lakes Loop
- Northeast Loop

Southern U.S.

- Pac. Southwest Loop
- Srn. Rockies Loop
- Southern Plains Loop
- Srn. Miss. Vly. Loop
- Southeast Loop

U.S. Views

Reflectivity:

- National Loop
- Alaska Loop
- Hawaii Loop
- Guam Loop
- Puerto Rico Loop

Base Reflectivity

[Full resolution version loop](#) (3400x1700 pixels - 2.2mb)

2008 UTC 01/24/2007

through 2118 UTC 01/24/2007



NWS Radar Mosaic - Central Great Lakes Sector

2038 UTC 01/24/2007





Detroit/Pontiac, MI

Local forecast by
"City, St" or Zip Code

Current Hazards

- [Watches / Warnings](#)
- [Outlooks](#)
- [U.S. Hazards](#)
- [Hurricane Info](#)
- [NOAA Watch](#)
- [Snowfall Forecast](#)
- [Submit a Report](#)

Current Conditions

- [Observations](#)
- [Satellite Images](#)
- [Rivers & Lakes AHPS](#)
- [Precip Estimate](#)
- [Snow Cover](#)
- [Drought Monitor](#)

Radar Imagery

- [Local Radar](#)
- [Nationwide](#)

Forecasts

- [Local Area](#)
- [Aviation](#)
- [Marine](#)
- [Fire Weather](#)
- [Graphical](#)
- [Weather Planner](#)

Rivers / Hydrology

- [AHPS / River Info](#)
- [Flash Floods](#)

Climate

- [Local](#)
- [National](#)
- [More...](#)

Weather - Now

The following links are to pages that should be updated every time a new product is issued. The pages are presently set up to cover most of the Great Lakes Region and will keep links on them to cover approximately the last 24 hours.

These web pages were created for educational use and are not meant for operational or professional use. Every effort has been taken to provide the most recent and reliable information available. However, there are occasions when the data are not current. The National Weather Service Products on these web pages should not be relied on in lieu of officially disseminated weather forecasts and warnings. The NWS has no control over the timeliness and availability of products on the Internet.

We hope that you find these pages very useful.

- [Tornado Warnings, Severe Thunderstorm Warnings, Severe Weather Statements, and Local Storm Reports](#)
- [Tornado and Severe Thunderstorm Watches](#)
- [Special Weather Statements](#)
- [Special Marine Warnings and Marine Weather Statements](#)
- [Winter Weather](#)
- [Flood Potential Statements and Flood Watches](#)
- [River Flood Warnings and Statements](#)
- [Flash Flood Warnings and Statements](#)
- [Current River Stages](#)
- [Fire Weather](#)
- [Area Forecast Discussions](#)
- [Revised Digital Forecasts](#)
- [Point Forecast Matrices](#)
- [State, Zone and Short-Term Forecasts for Great Lakes Region](#)
- [Great Lakes Forecasts and Nearshore Forecasts](#)
- **NEW** [Great Lakes Port Forecasts](#)
- [Non - Precipitation Weather Products](#)
- [Public Information Statements](#)
- [Daily and Monthly Climate Summaries from across Michigan](#)
- [Record Reports, Regional Temperature and Precipitation tables, and State Temperature and Precipitation tables.](#)

0550 PM 07/21/98	ANN ARBOR WASHTENAW	MI	75 MPH TSTM GUST RECORDED AT ANN ARBOR AIRPORT
0551 PM 07/21/98	6 S CHELSEA WASHTENAW	MI	WIND DAMAGE SPOTTERS REPORTED WIDESPREAD TREE DAMAGE AND SEVERAL TREES BLOWN DOWN ALONG M 52 BETWEEN CHELSEA AND MANCHESTER
0555 PM 07/21/98	2 NE ADRIAN LENAWEE	MI	65 MPH TSTM GUST HAM RADIO OPERATOR REPORTED 2 TREES BLOWN DOWN 2 MILES NORTHEAST OF ADRIAN
0600 PM 07/21/98	WATERFORD OAKLAND	MI	WIND DAMAGE NWS EMPLOYEE NUMEROUS TREE BRANCHES BLOWN DOWN ALONG PONTIAC LAKE ROAD BETWEEN AIRPORT ROAD AND HOSPITAL ROAD
0605 PM 07/21/98	FARMINGTON OAKLAND	MI	WIND DAMAGE NWS EMPLOYEE REPORTED A TREE UPROOTED AND SEVERAL LARGE TREE BRANCHES BROKEN IN FARMINGTON
0612 PM 07/21/98	BRITTON LENAWEE	MI	1.75 INCH HAIL HAM RADIO OPERATOR REPORTED GOLFBALL SIZE HAIL
0613 PM 07/21/98	STERLING HGTS MACOMB	MI	.75 INCH HAIL SPOTTER REPORTED DIME SIZE HAIL
0613 PM 07/21/98	BLOOMFIELD HILLS OAKLAND	MI	WIND DAMAGE OAKLAND COUNTY EOC REPORTED NUMEROUS TREE BRANCHES BLOWN DOWN...POWER OUTAGES... AND TRAFFIC LIGHTS OUT
0617 PM 07/21/98	WARREN MACOMB	MI	65 MPH TSTM GUST SPOTTER REPORTED 65 MPH TSTM WIND GUST AT THE INTERSECTION OF 11 MILE AND HOOVER
0620 PM 07/21/98	TROY OAKLAND	MI	WIND DAMAGE HAM RADIO OPERATOR REPORTED 6 TO 12 INCH DIAMETER TREE BRANCHES LAYING ON HOME
0624 PM 07/21/98	STERLING HGTS MACOMB	MI	76 MPH TSTM GUST SPOTTER REPORTED A 76 MPH TSTM WIND GUST AT THE INTERSECTION OF 15 MILE AND VAN DYKE



Telephone Survey Worksheet

Agent/AFE	Agent Location	Fire Policy Count	Fire Claims Reported	Confirmed Severity 1's	Auto Policy Count	Auto Claims Reported	Non-Drives	Agents Office Damaged

Comments		
Completed By:	Date	Time



FIELD SURVEY CHECKLIST - High Winds/Hail/Tornado/Flood

SURVEYOR - NAME & CONTACT NUMBER(S)

CITIES, ZIP CODE(S), NEIGHBORHOODS SURVEYED

LOCATION (MAJOR INTERSECTIONS MARKING THE PERIMETER - BE SPECIFIC)

HAIL

HAILSTONE SIZE

HAILSTONE DENSITY

ROOF MATERIALS (% OF ALL ROOFS)

_____PEA

_____SOFT

_____COMPOSITION

_____MARBLE

_____SOLID

_____WOOD

_____QUARTER

_____BUILT-UP

_____GOLF BALL

_____BASEBALL

WIND DRIVEN? _____ DIRECTION OF WIND? _____

EXPOSURES OF RISKS DAMAGED (E/W/N/S)? _____

TYPES OF DAMAGE? _____

VEHICLES DAMAGED? YES _____ NO _____

WIND / TORNADO / WIND SHEER / MICROBURST

LEAVES OFF TREES? YES _____ NO _____

LIMBS OFF TREES? YES _____ NO _____

ENTIRE TREES DOWN? YES _____ NO _____

UNINHABITABLE AREAS OR RISKS? _____

IF SO, WHERE? (BE SPECIFIC) _____

ROOFS DAMAGED? YES _____ NO _____

SHINGLES? _____ DECKING? _____ TRUSSES/RAFTERS? _____

SIDING DAMAGED? YES _____ NO _____

AWNINGS/ PATIO COVERS DAMAGED? YES _____ NO _____

FENCES DAMAGED? YES _____ NO _____

AUTOS DAMAGED? YES _____ NO _____

FLOOD

LOCATION? (MAJOR INTERSECTIONS MARKING THE PERIMETER?)

BASEMENTS, STREETS, ENTIRE AREA, DEPTH? _____

CAUSE OF FLOODING? _____

DURATION OF FLOOD? _____

PERCENTAGE OF RISKS DAMAGED AND SEVERITY DISTRIBUTION (All Causes)

**PERCENTAGE OF OVERALL RISKS IN AREA DAMAGED?
(X OUT OF 10 or %) _____**

SEVERITY DISTRIBUTION OF DAMAGED RISKS

SEVERITY 1 (UNINHABITABLE) _____%

SEVERITY 2 (MODERATE) + _____%

SEVERITY 3 (LIGHT DAMAGE) + _____%

= 100 %

Send Damage Photos As Attachments and Identify Location

Why Survey?...and... Is my information important?

Sample Area – Anytown, Michigan / Policy Count = 2,000

Projection A

20% of homes damaged
2,000 policies x 20% = 400 claims
400 / 50 claims per rep = 8 reps
8 reps x \$650/day = **\$5,200/day**

Office space / 1 unit = 1,200 sf
1,200 x \$15/sf = **\$18,000 / month**

Projection B

50% of homes damaged
2,000 policies x 50% = 1,000 claims
1,000 / 50 claims per rep = 20 reps
20 reps x \$650/day = **\$13,000/day**

Office space / 2 units = 2,000 sf
2,000 x \$15/sf = **\$30,000 / month**

POINT: If we don't survey right, we don't project right.
Wrong projections waste expenses (too many people)
Or, lead to poor service (too few people)

WICKED

WITCH



Fire FIRECATQ Summary
 Cat:
 11-11-1998 07:25 PM

Severity

Code	Received
	981
1	35
2	362
3	545
GRAND TOTALS:	
	1,923

Fire FIRECATQ Summary
 Cat:
 09-29-1998 10:26 AM

Received Agent Code

2	6650
82	6676
1	6678
60	6693
2	6699
2	6740
1	6741
1	6757
1	6763
2	6767
1	6772
1	6794

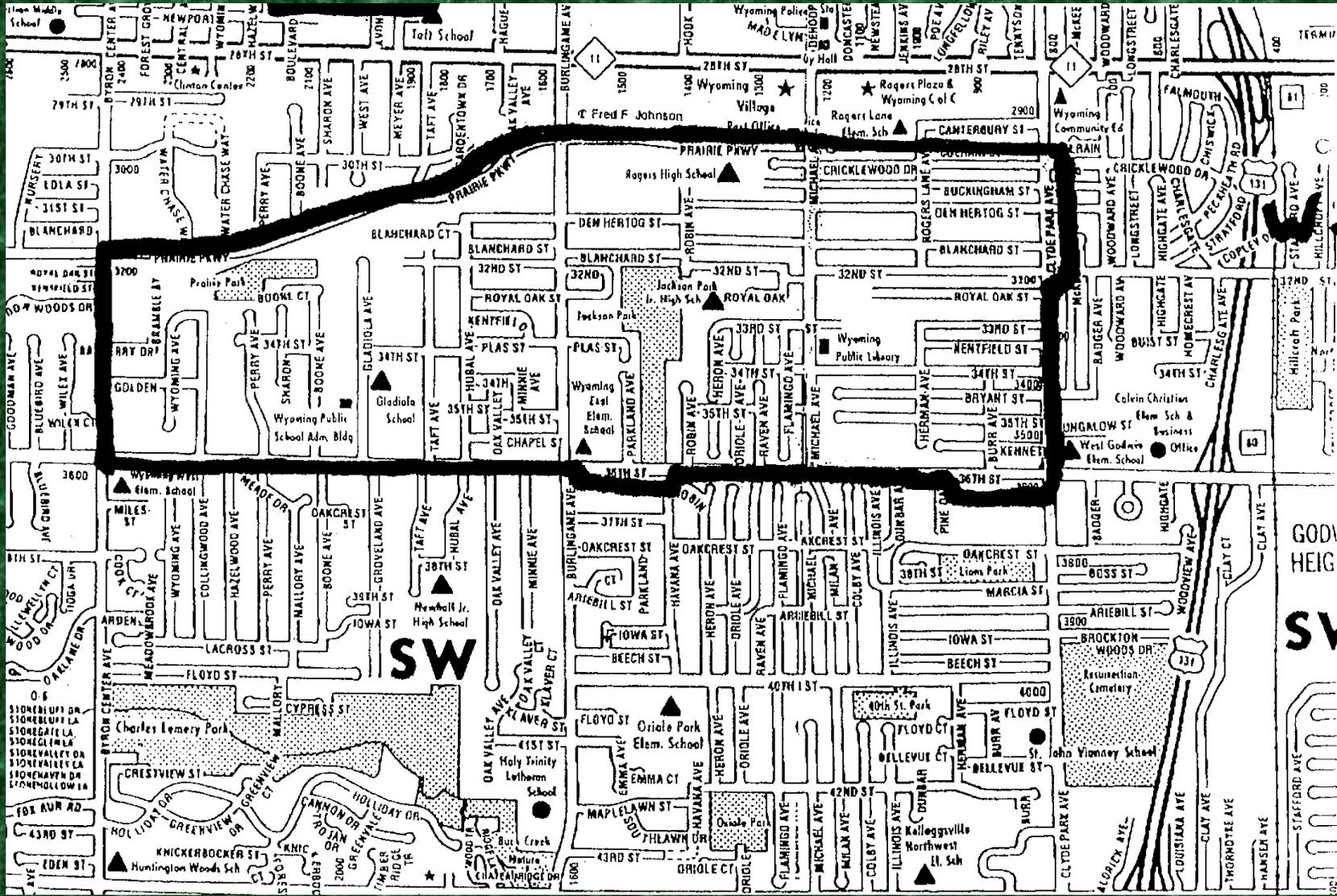
GRAND TOTALS:
 226

Fire FIRECATQ Summary
 Cat:
 09-29-1998 10:27 AM

Received ZIP or Postal

1	49660
1	49668
1	49675
1	49680
1	49684
1	49686
6	49707
3	49709
3	49712
1	49721
3	49727
2	49729
5	49730
1	49733
121	49735
1	49753
1	49755
1	49770
24	49795
1	49862

GRAND TOTALS:
 226

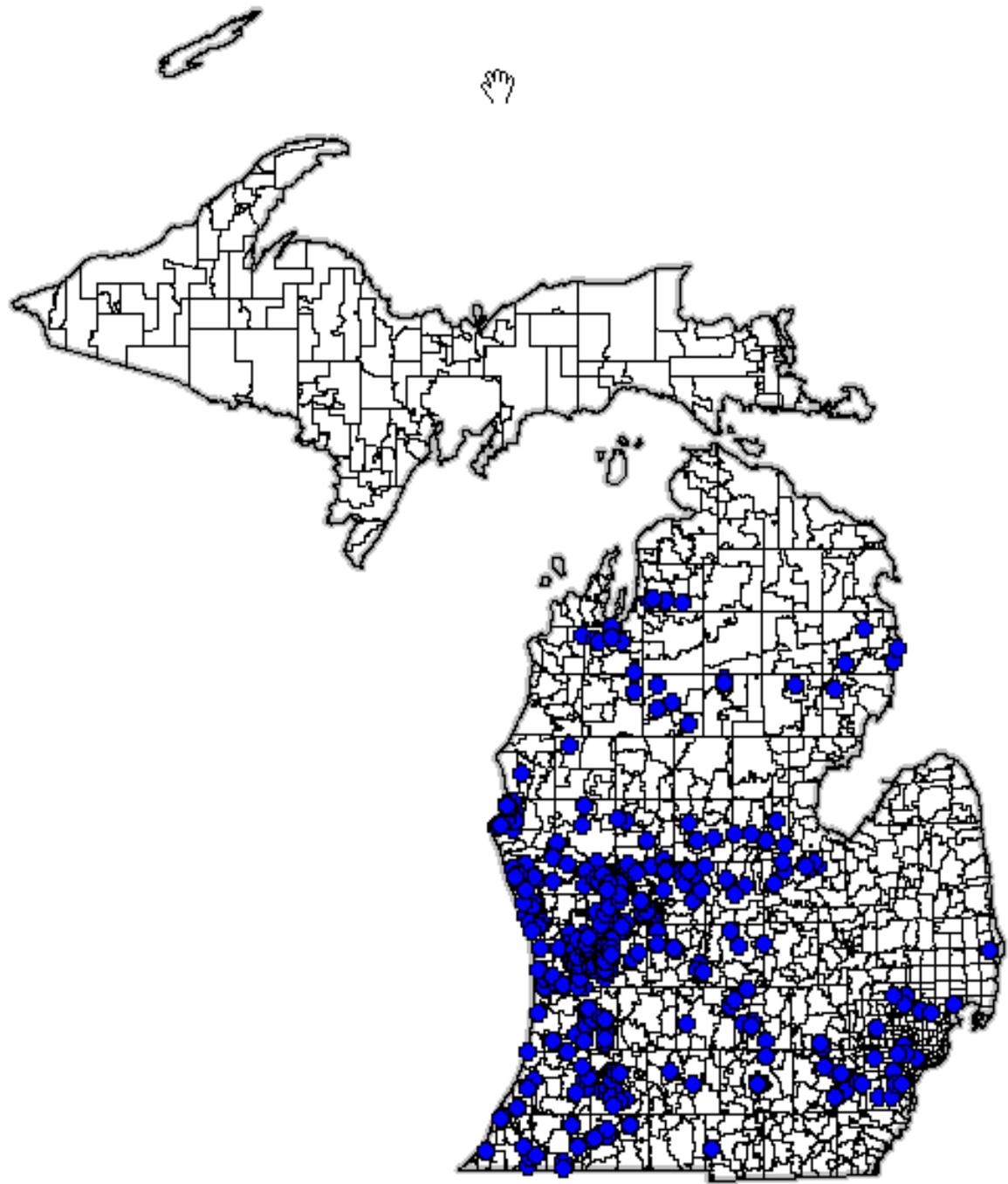


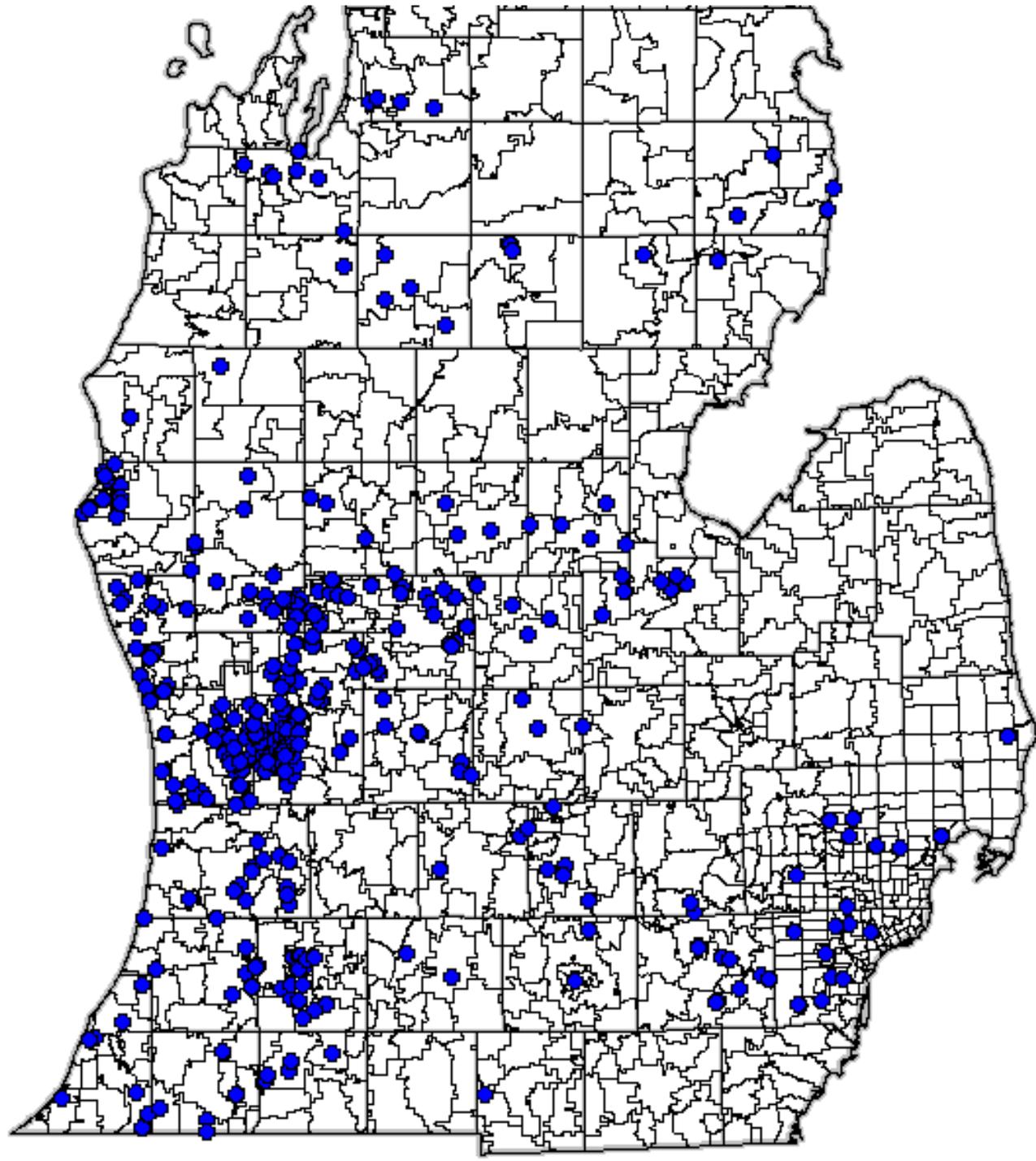
N
S
E

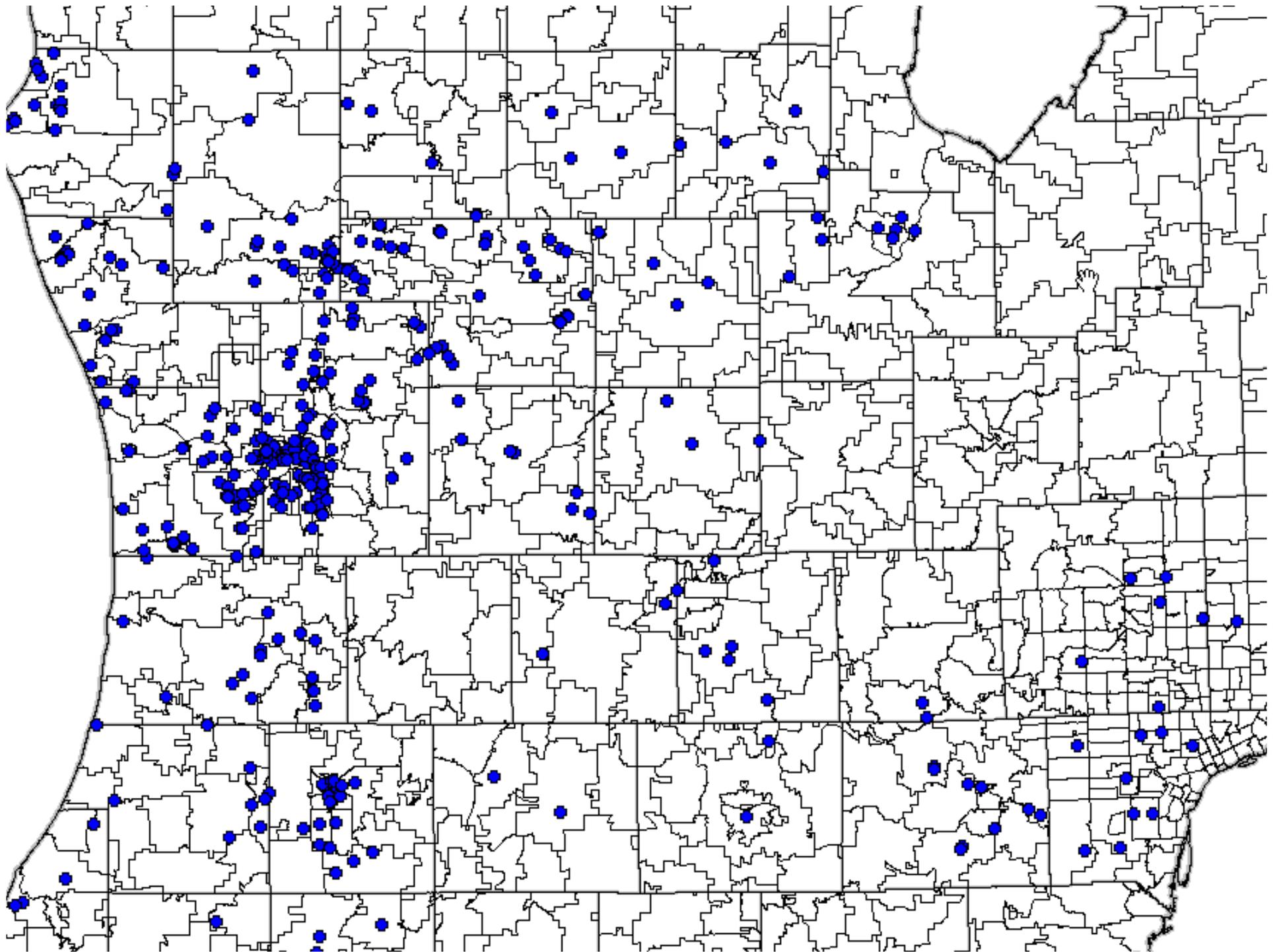
SW

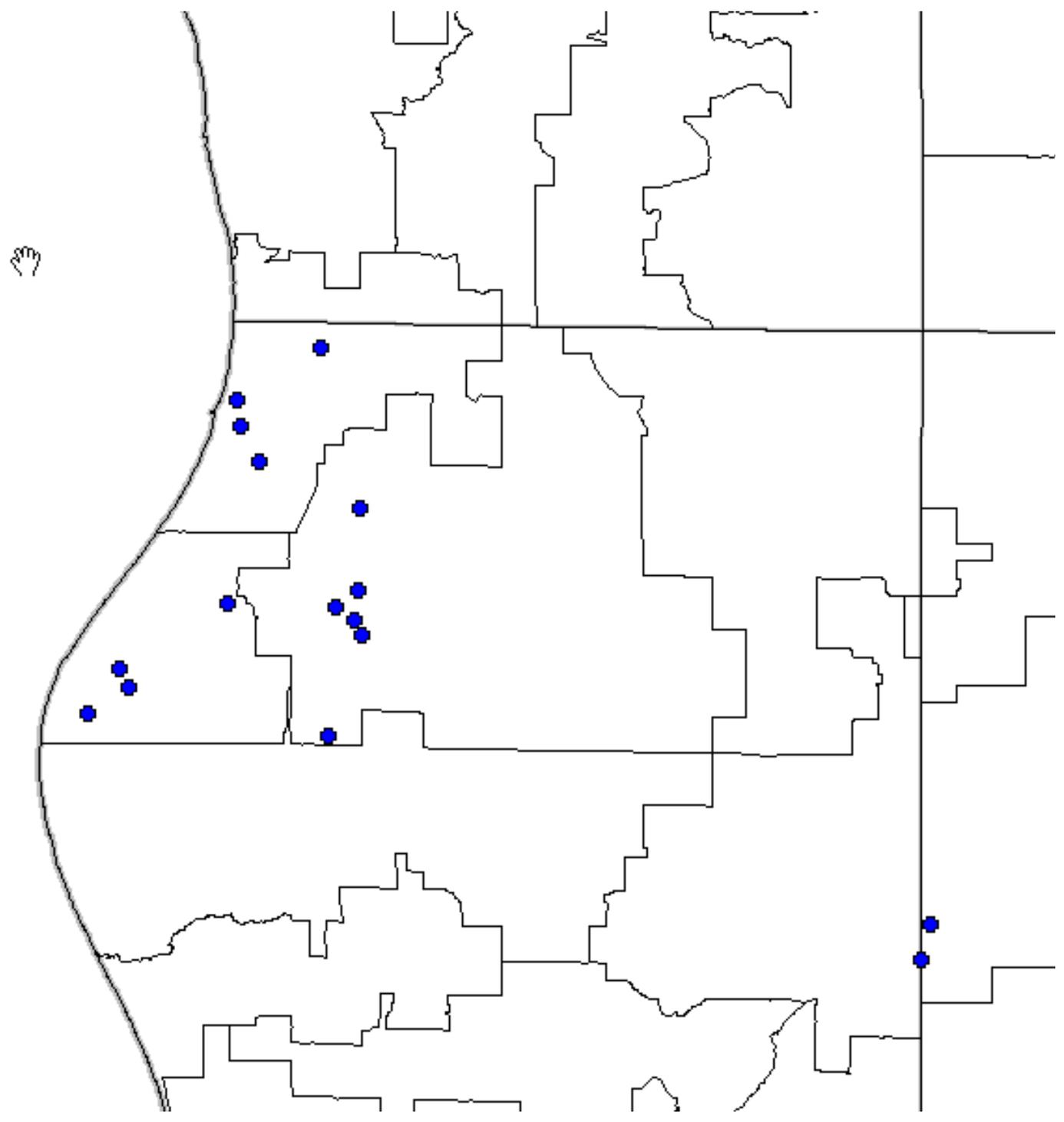
S
W

SW









Ready?...Spring is Just Around the Corner

Your Questions, Please?

