Case Studies in Open Data

NCPP National Conference 2018

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Office of Performance and Transformation

State of Michigan

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Approach 1:
Feature Driven

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Approach 2: Purpose Driven

Impactful Open Data Projects

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Citizen Experience

michigan fish data 🎤 🔍

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About 36,300,000 results (0.45 seconds)

Michigan Fish - Michigan | Open Data - State of Michigan
https://data.michigan.gov/Environment/Michigan-Fish/he9h-7fpa
Average life-span of these **fish** is 5 to 6 years. For more information on how and where to catch bluegill see our **Michigan Fish** and How to Catch Them and ...

Michigan Fish - Michigan | Open Data - State of Michigan
https://data.michigan.gov/Environment/Michigan-Fish/he9h-7fpa/data
Sep 5, 2014 - closeThis Socrata-powered site may be unavailable for routine maintenance from Saturday, September 22, 2018 8:00 PM PDT to Saturday, ...

Fish Stocking Database - DNR
https://www.michigandnr.com/fishstock/ ▾
Fish Stocking **Database**. **Fish** Stocking **Database**. Department of Natural Resources **Michigan** DNR. County: All, Alcona, Alger, Allegan, Alpena, Antrim, Arenac ...

Michigan Fish

Fish species found in Michgan

Id	CommonName	LatinName	Narrative	Image
1	Asian Carp		Bighead Carp Can weigh up to 90 lbs and be nearl...	
2	Atlantic Salmon,	Salmo salar	Identifying characteristics: Two dorsal fins includi...	7Lc1930XyISGXEYfoC...
3	Bluegill	Lepomis macrochirus	Identifying characteristics: Two dorsal fins with sp...	ns8bokhW1VmtHWU...
4	Bowfin	Amia calva	Identifying characteristics: Long, stout body with a...	
5	Brook Trout	Salvelinus fontinalis		
6	Brown Bullhead	Ameiurus nebulosus		
7	Brown Trout	Salmo trutta		
8	Channel Catfish	Ictalurus punctatus		
9	Chinook Salmon	Oncorhynchus tshawytscha		
10	Coho Salmon	Oncorhynchus kisutch		
11	Lake Herring	Coregonus artedi		
12	Lake Sturgeon	Acipenser fulvescens		
13	Lake Trout	Salvelinus namaycush		
14	Lake Whitefish	Coregonus clupeaformis		
15	Largemouth Bass	Micropterus salmoides		
16	Menominee	Prosopium cylindraceum		
17	Muskellunge	Esox masquinongy		
18	Northern Pike	Esox lucius		
19	Pink Salmon	Oncorhynchus gorbuscha	Identifying characteristics: Two dorsal fins includi...	5dGh2KYfY95ImNFYgj...

Identifying characteristics: Two dorsal fins with spinous and soft-rayed portions united, small mouth, long pointed pectoral fins, faint black spot on soft-rayed part of dorsal fin separates the bluegill from other sunfish, which lack this dorsal coloration. The sunfish family, or Centrarchidae, includes such popular panfish as bluegills, rock bass and large and smallmouth bass. The members of this family resemble the perch and sea bass families, but they differ in that the sinous and soft portions of the dorsal fin are united and confluent. The large mouth bass is an exception, with a deep notch between the front and rear parts of the dorsal fin. The Centrarchidae generally prefer warm water, and are nesting fishes. That is, the males scoop out a depression where one or more females deposit eggs. The males then fertilize and guard the eggs and the newly hatched young. The bluegill is a native to eastern and central North America, including the lower Great Lakes. This fish enjoys a well-deserved popularity with anglers. Many a young angler boasts the delicious bluegill as a first catch, while seasoned anglers using light tackle find it a valiant fighter. Bluegills favor warm waters (64 to 70 degrees F) with plenty of cover such as weed beds, submerged logs, or drop-offs. They usually stay in relatively shallow water, but as temperatures rise in the summer, large bluegills will head for deeper water. This fish also provides good winter sport since it remains active all winter long. The bluegill spawns in the shallows in the late spring or early summer when the water temperature reaches 65 degrees F. Males build nesting colonies in gravel, sand or mud and will guard the eggs and newly hatched fry until they reach the swimming stage. The young fry eat algae and zooplankton. As they grow larger, bluegills add small fish, aquatic insects and plant matter to their diet. The bluegill feeds off the surface of the water the midwaters and the bottom, where it can be a serious competitor with other bottom feeding fish. The average adult bluegill is 6 to 8 inches long, although some reach 10 inches. Sexual maturity occurs at 2 to 3 years for males and 3 to 4 years for females. Average life-span of these fish is 5 to 6 years. For more information on how and where to catch bluegill see our Michigan Fish and How to Catch Them and Better Fishing Waters.

Access this Dataset via SODA API

The Socrata Open Data API (SODA) provides programmatic access to this dataset including the ability to filter, query, and aggregate data.

📄 API Docs | ⚙️ Developer Portal

API Endpoint

https://data.michigan.gov/resource/gedb-8ff3. | JSON | Copy

Agency Improvement
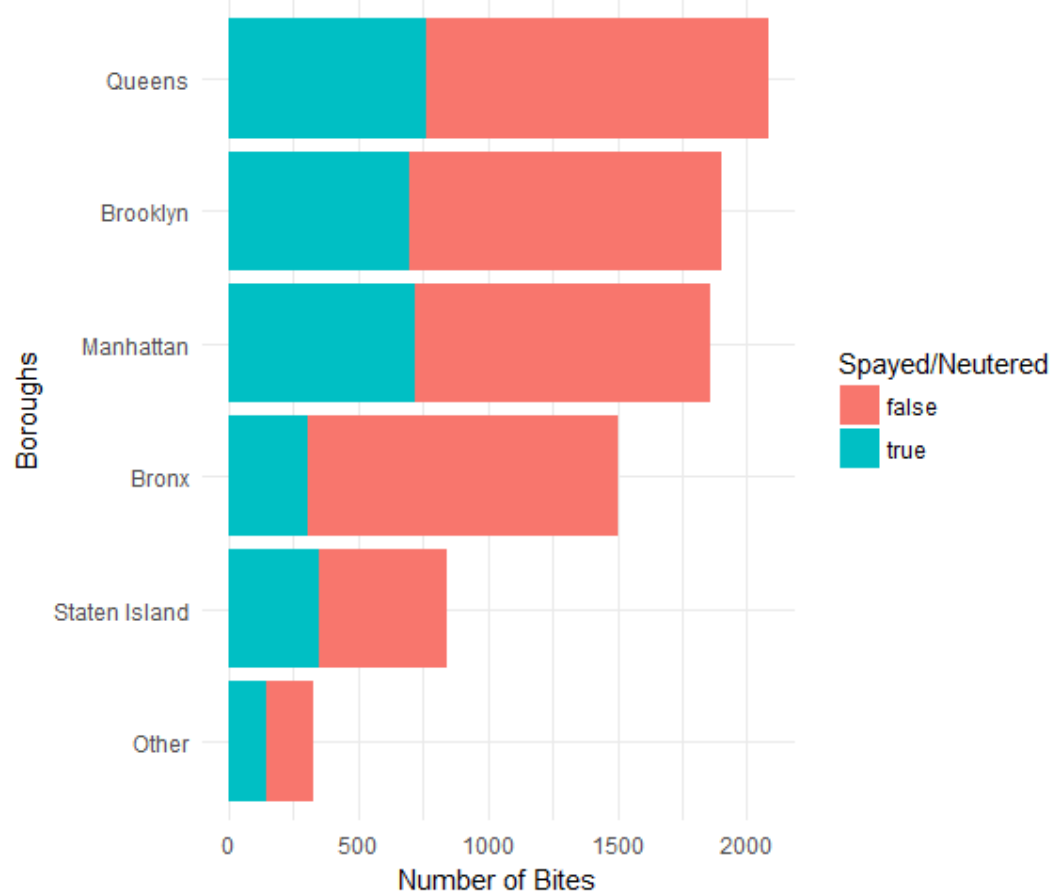
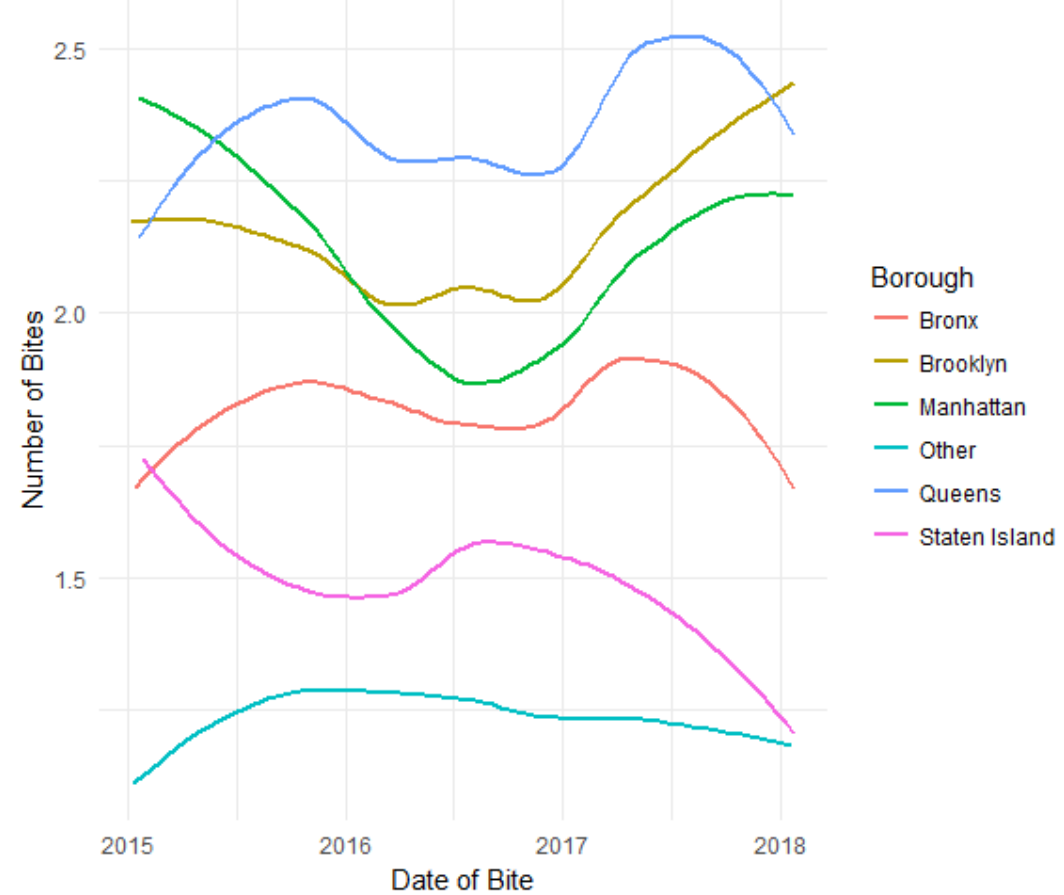Show 50 entries   Search:

County	Public Water Supply	Population Served	Sampling Date	Sample Number	Raw Water or Treated Drinking Water?	PFOA + PFOS (ppt)	Total Tested PFAS (ppt)	Method
ALLEGAN	Country Acres Mobile Home Park	160	06-06-2018	GW1806061420KER	Raw Water	ND	ND	EPA 537 Rev. 1.1
ALLEGAN	Country Meadows	158	06-12-2018	GWT1806121325GSC	Raw Water	ND	ND	EPA 537 Rev. 1.1
ALLEGAN	Lakeside Park MHP	65	06-13-2018	GWINT1806131115KET	Raw Water	ND	ND	EPA 537 Rev. 1.1
ALLEGAN	Sandy Pines	85	06-06-2018	GW1806061210KER	Raw Water	ND	ND	EPA 537 Rev. 1.1
ALLEGAN	Indian Acres Mobile Home Park	88	06-12-2018	GWT1806121010KER	Raw Water	ND	ND	EPA 537 Rev. 1.1
ALLEGAN	Riverwalk Development	38	06-06-2018	GW1806061255KER	Raw Water	ND	ND	EPA 537 Rev. 1.1
ALLEGAN	Dogwood Manor Mobile Home Park	190	06-05-2018	GW1806051120GSC	Raw Water	ND	ND	EPA 537 Rev. 1.1

Government Community

```r
# dog bites by date

dog_bites$dateofbite <- as.Date(dog_bites$dateofbite)

p3 <- dog_bites %>%
  filter(dateofbite >= as.Date("2015-01-01")) %>%  # bites since 2015
  group_by(borough, dateofbite) %>%  # bites change over time?
  summarize(bites = n()) %>%  # number of bites
  ungroup()

p3 %>%
  ggplot(aes(x = dateofbite, y = bites, color = borough)) +
  geom_smooth(se = FALSE) +  # smoothed conditional mean
  theme_minimal() +
  labs(x = "Date of Bite",
       y = "Number of Bites",
       color = "Borough",
       title = "Dog Bite Incidences by Borough over Time")
```

Tweets	Top Tweets	Tweets and replies	Promoted		Impressions	Engagements	Engagement rate
Justin Baker @AskJustinBaker · Aug 17 ggplot + **@socrata** API + RSocrata package on this GREAT new dog bite incidence dataset from **@NYCDoITT** **#opendata #rstats** bit.ly/2nKRib5 pic.twitter.com/qUPItXJLFV View Tweet activity					1,391	60	4.3%

For Questions!

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