



Shark Attack

1st project Data Analysis - IronHack



Hypothesis:

How can we reduce the number of shark attacks in the US?

Why US?

Country	Attacks	%
USA	2228	35,6%
AUSTRALIA	1338	21,4%
SOUTH AFRICA	579	9,3%
PAPUA NEW GUINEA	134	2,1%
NEW ZEALAND	128	2,0%
BRAZIL	112	1,8%
BAHAMAS	109	1,7%
MEXICO	89	1,4%
ITALY	71	1,1%
FIJI	62	1,0%

Variables analyzed:

- Area
- Month
- Type
- Sex
- Age
- Fatal



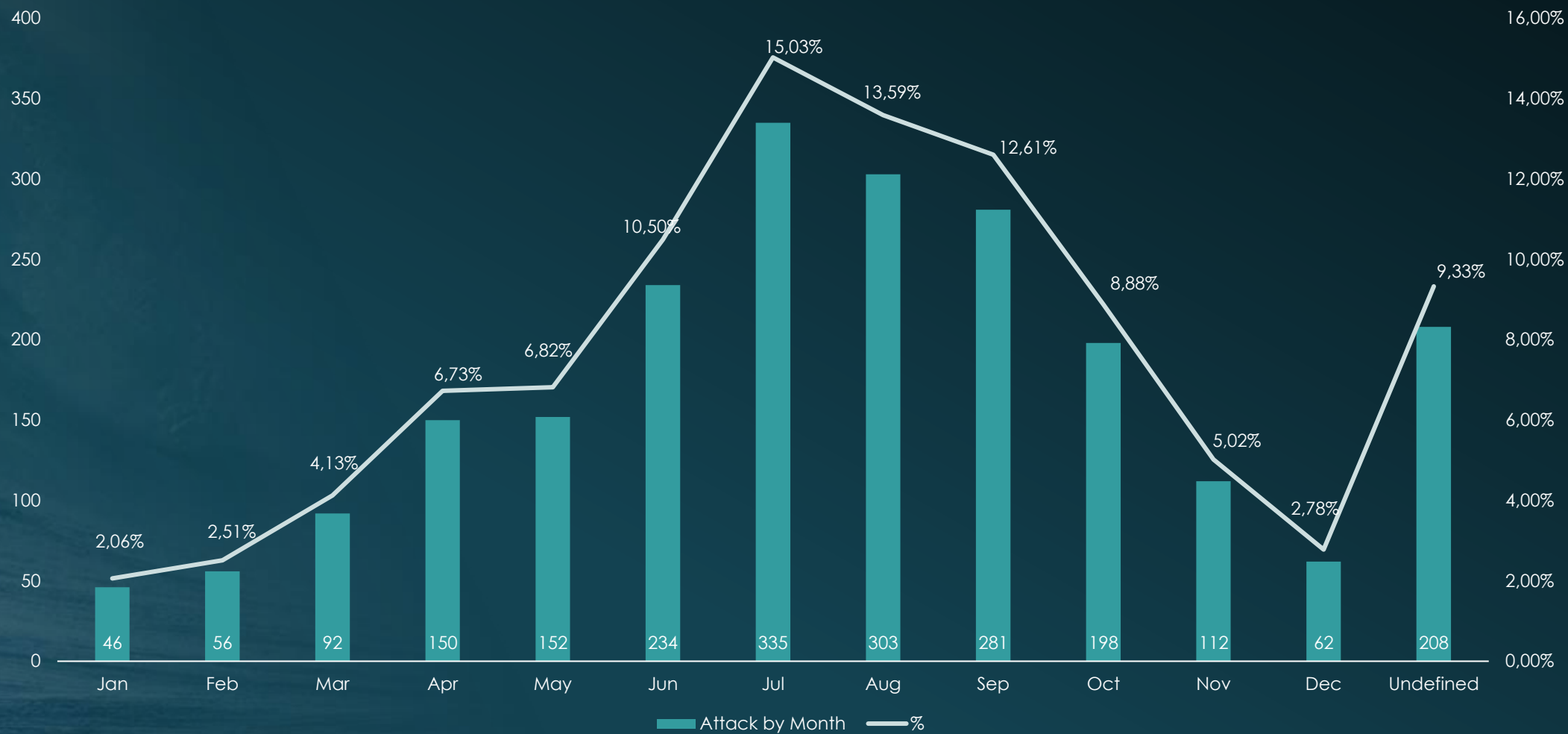
Target audience for
awareness campaign

Area:

Area	Attack by Area	%
Florida	1038	46,6%
Hawaii	298	13,4%
California	290	13,0%
South Carolina	160	7,2%
North Carolina	104	4,7%
Texas	73	3,3%
New Jersey	53	2,4%
New York	33	1,5%
Oregon	29	1,3%
Virginia	19	0,9%

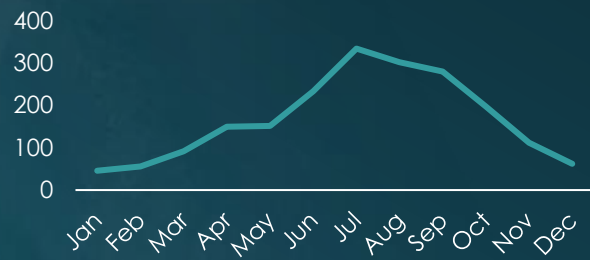
*In 2022 Florida received more than 120 millions of tourists

Month:

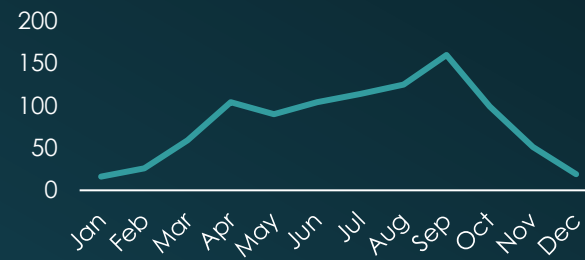


Area vs Month

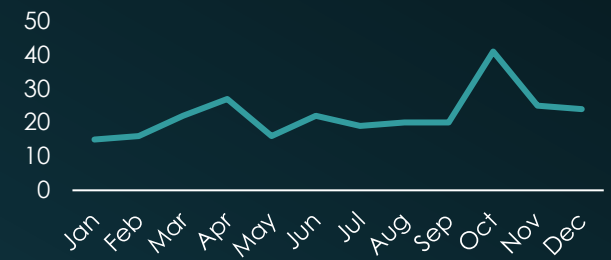
Total



Florida



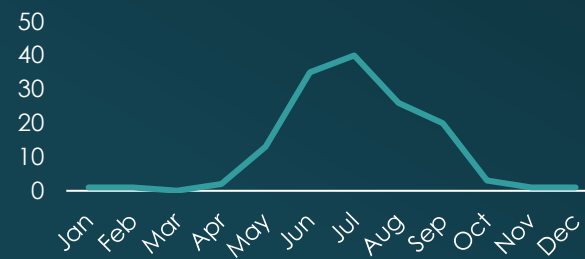
Hawaii



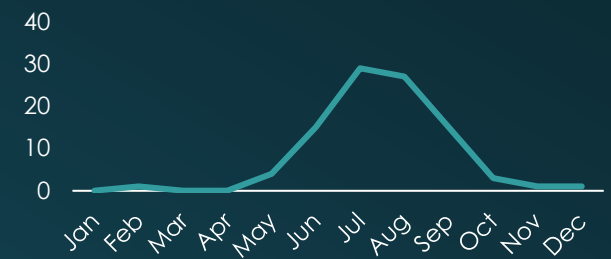
California



South Carolina



North Carolina



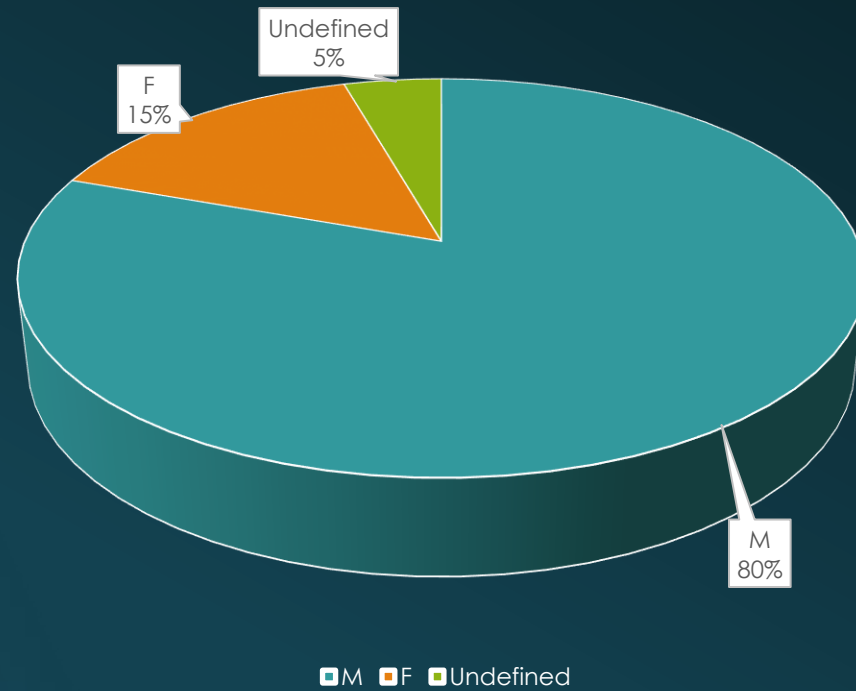
Area vs Month

Month/ Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Und.	Total
Total	46	56	92	150	152	234	335	303	281	198	112	62	208	2229
Florida	16	26	59	104	90	104	114	125	160	99	51	19	71	1038
Hawaii	15	16	22	27	16	22	19	20	20	41	25	24	31	298
California	9	5	7	8	17	23	52	43	38	36	21	12	19	290
South Carolina	1	1	0	2	13	35	40	26	20	3	1	1	17	160
North Carolina	0	1	0	0	4	15	29	27	15	3	1	1	8	104
Texas	1	1	0	4	7	10	24	9	4	3	0	0	10	73
New Jersey	0	0	0	0	0	7	16	11	1	1	2	1	14	53
New York	1	0	0	0	0	3	9	10	5	0	0	0	5	33
Oregon	2	1	1	1	0	0	2	3	7	7	3	2	0	29

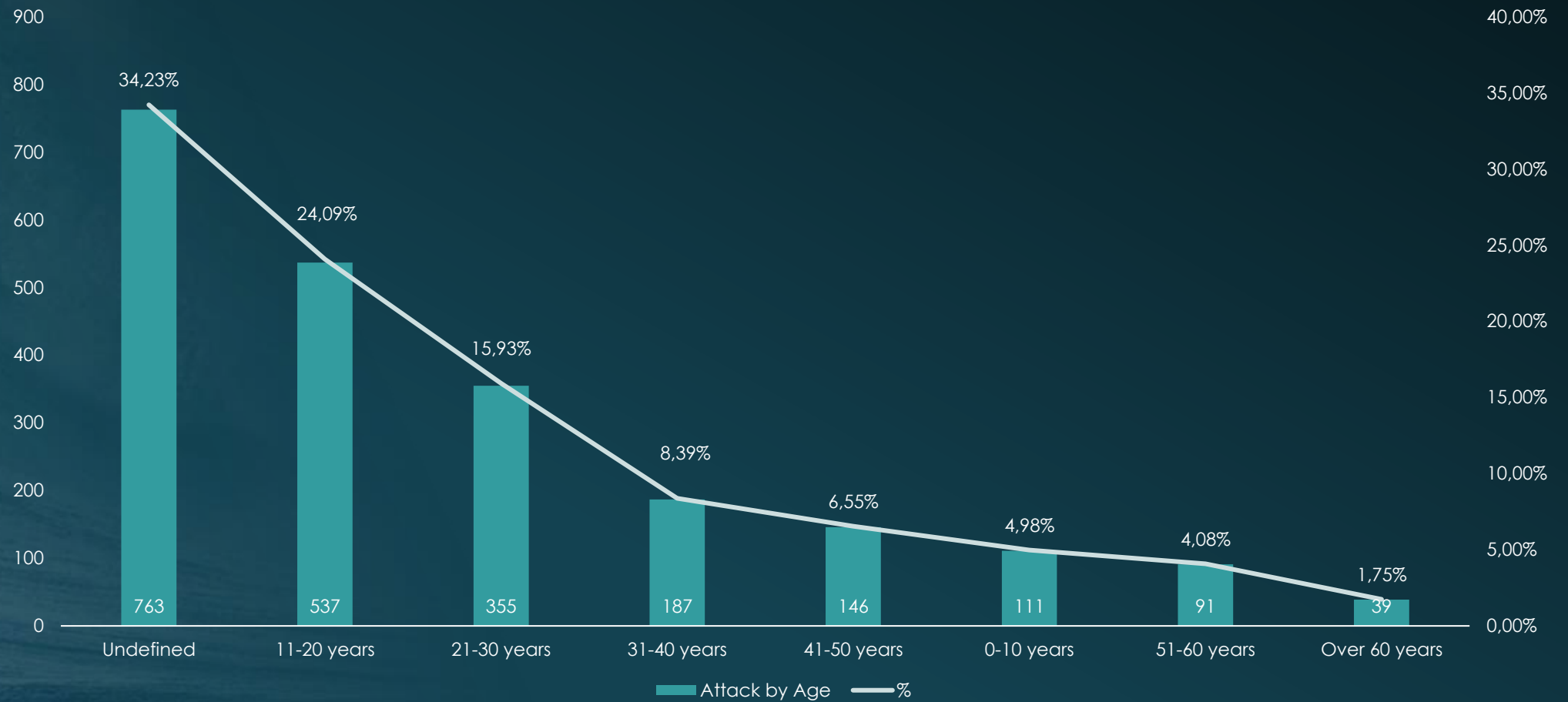
Type:

Type	Attack by Type	%
Unprovoked	1721	77,21%
Provoked	208	9,33%
Undefined	193	8,66%
Boat	75	3,36%
Sea Disaster	32	1,44%

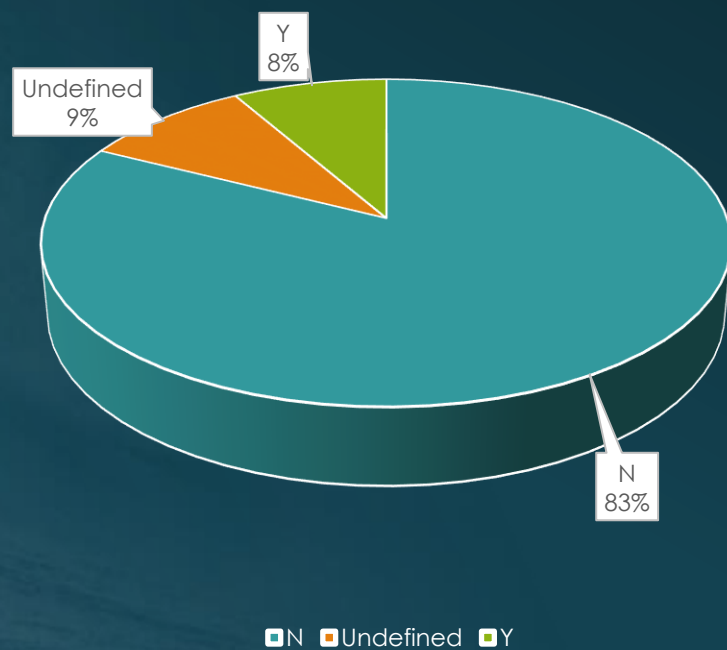
Sex:



Age:



Fatal:



Cause of death	Risk odds
Heart disease	1 in 5
Cancer	1 in 7
Stroke	1 in 24
Hospital Infections	1 in 38
Flu	1 in 63
Car accidents	1 in 84
Suicide	1 in 119
Accidental poisoning	1 in 193
MRSA (resistant bacteria)	1 in 197
Falls	1 in 218
Drowning	1 in 1,134
Bike accident	1 in 4,919
Air/space accident	1 in 5,051
Excessive cold	1 in 6,045
Sun/heat exposure	1 in 13,729
Lightning	1 in 156,169
Train crash	1 in 156,169
Fireworks	1 in 340,733
Shark attack	1 in 3,748,067

Source: UF/National Safety Council/CDC



Conclusion:

- **Target audience :**
 - Men
 - Age: 15-30 Years
- **Area:**
 - Florida, California, Hawaii, North Carolina and South Carolina
- **Months:**
 - Florida and Hawaii: all year
 - Other states: April to October, more intense during summer
- **Awareness:**
 - Sharks are not violent: most attacks are unprovoked → stay away from Sharks
 - At least 8% are fatal