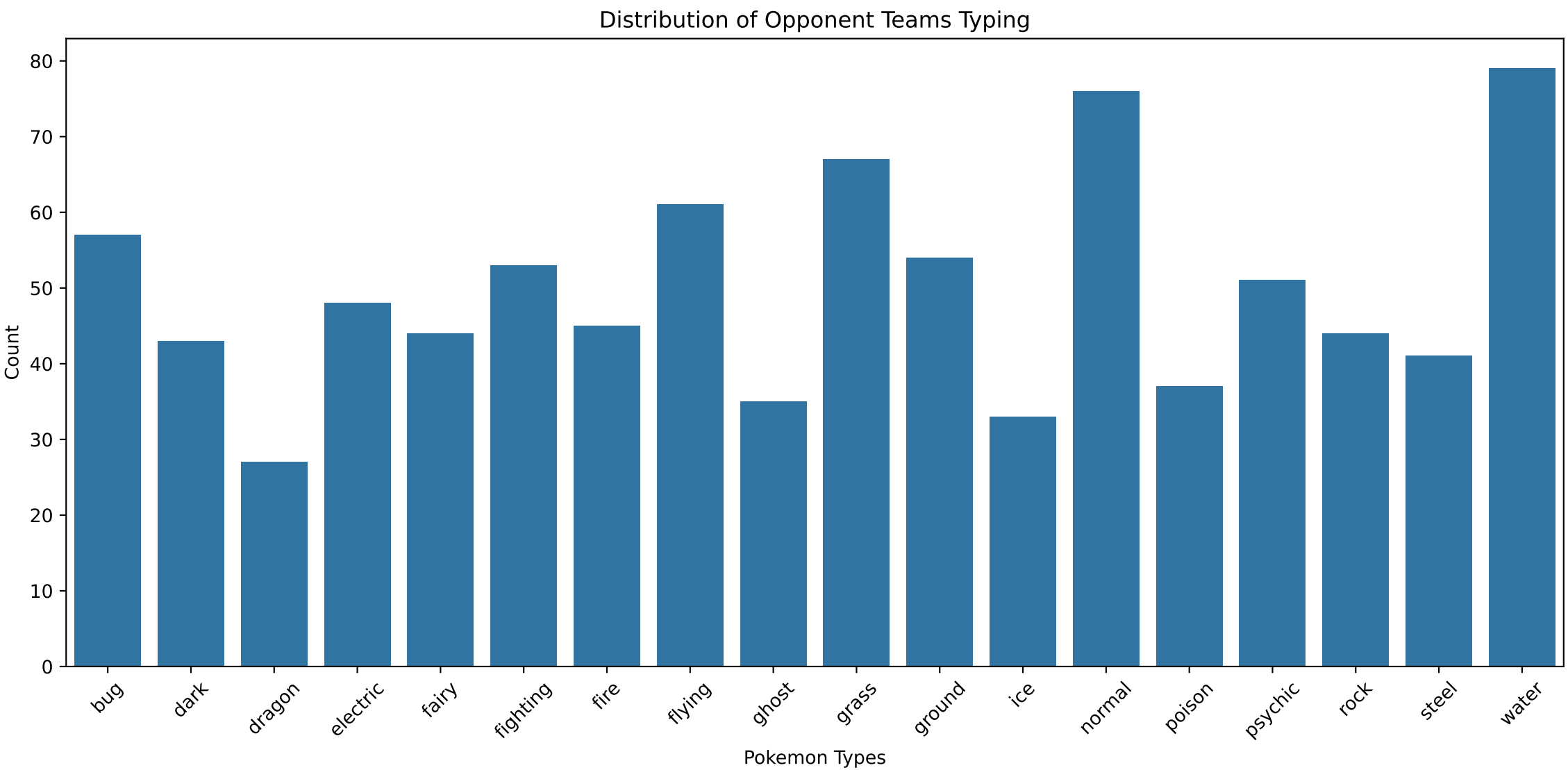
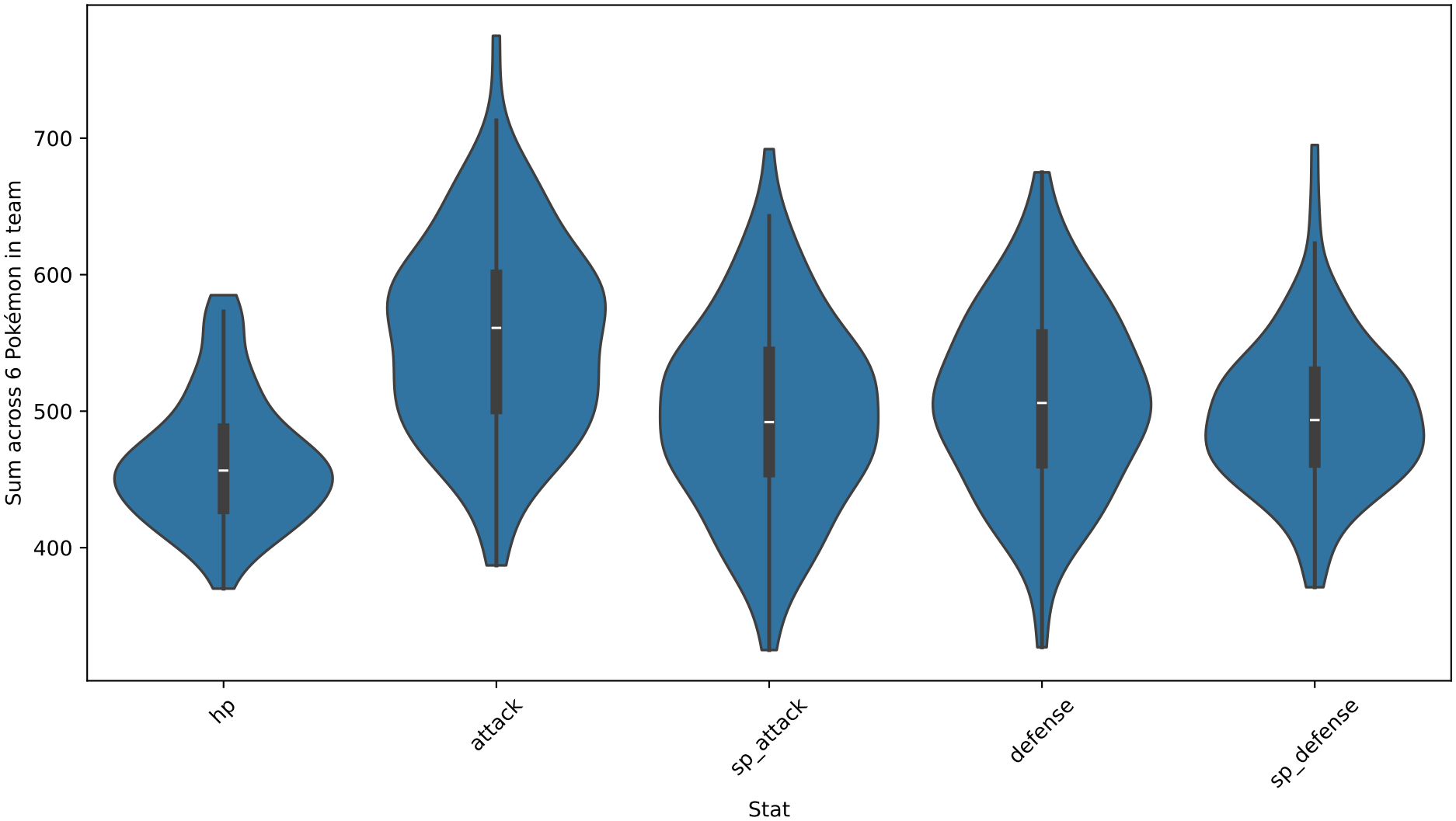
Evolutionary Algorithm - Population Size Experiment

Setup:

- Population size: 20
- Generations: 20
- Mutation rate: 0.6
- Elite size: 1
- Tournament size: 3


Distribution of Opponent Teams Typing
Count
0
10
20
30
40
50
60
70
80
bug
dark
dragon
electric
fairy
fighting
fire
flying
ghost
grass
ground
ice
normal
poison
psychic
rock
steel
water
Pokemon Types


Opponents: distribution of team stat sums
Sum across 6 Pokémon in team
700
600
500
400
hp
attack
sp_attack
defense
sp_defense
Stat

EA - Results of individual runs

run	solver	elite_size	fitness	stats_sum	pokemons
0	EA	1	0.39444444444444443	2461	PokemonTeam(size=6, names=['Slaking', 'Salazzle', 'Garchomp', 'Tyranitar', 'Slurpuff', 'Avalugg'])
1	EA	1	0.4950489510489511	2459	PokemonTeam(size=6, names=['Tyranitar', 'Heracross', 'Goodra', 'Slowbro', 'Blissey', 'Beartic'])
2	EA	1	0.4379156327543424	1876	PokemonTeam(size=6, names=['Tangrowth', 'Incineroar', 'Blissey', 'Yanmega', 'Golem', 'Wobbuffet'])
3	EA	1	0.41108860759493665	1900	PokemonTeam(size=6, names=['Alomomola', 'Rhyperior', 'Blissey', 'Haxorus', 'Tropius', 'Luxray'])
4	EA	1	0.5094054054054054	2120	PokemonTeam(size=6, names=['Rhyperior', 'Abomasnow', 'Snorlax', 'Milotic', 'Arcanine', 'Wobbuffet'])
5	EA	1	0.4668187744458932	2000	PokemonTeam(size=6, names=['Tyrantrum', 'Abomasnow', 'Krookodile', 'Clefable', 'Drifblim', 'Blissey'])

EA - Summary statistics

solver	mean	median	std	min	max	count
EA	0.452454	0.452367	0.045938	0.394444	0.509405	6