

#805 Eating Invasive Species

Yonglin Wang, Xiaoyu Lu, Yunjing Lee, Ruobin Hu



Topic Overview

Title:

eating invasive species

Description:

Would eating invasive species be a viable method of controlling/eradicating them?

Narrative:

Relevant documents identify invasive species in the U.S. that can be eaten by human beings and discuss the likelihood of controlling the species through consumption. Comments on the color, taste, texture, or other culinary qualities of particular invasive species are also relevant.

Baseline Retrieval Scores

Average Precision

comb	title	description	narrative
BM25 + default analyzer	0.33663	0.394961	0.583333
BM25 + custom analyzer	0.339719	0.22619	0.5625
Reranking with fastText embeddings + default analyzer	0.533024	0.214491	0.105556
Reranking with sentence BERT embeddings + default analyzer	0.362633	0.491516	0.1875

Baseline Retrieval Scores

R-precision

comb	title	description	narrative
BM25 + default analyzer	0.25	0.2	0.1
BM25 + custom analyzer	0.35	0.1	0.2
Reranking with fastText embeddings + default analyzer	0.25	0.2	0.1
Reranking with sentence BERT embeddings + default analyzer	0.25	0.2	0.1

Baseline Retrieval Scores

NDCG@20 for PA5 System

comb	title	description	narrative
BM25 + default analyzer	0.57707095	0.54348136	0.693426404
BM25 + custom analyzer	0.54730548	0.39748219	0.658914075
Reranking with fastText embeddings + default analyzer	0.69520304	0.43824832	0.324171071
Reranking with sentence BERT embeddings + default analyzer	0.59269152	0.62646203	0.414074916

What we have been doing so far

- Decide to use Longformer: The Long-Document Transformer
- Longformer vectors
- LongformerEmbedding class

What we plan to do and any issues or discoveries you have encountered

- Incorporate Longformer
- Result snippet highlight

About 294 results (1.09 seconds)

<https://www.washingtonpost.com> › national › 2014/05/25 ⋮

Can U.S. eliminate invasive species by eating them? - The ...

May 25, 2014 — “**Eating invasive species** is not a silver bullet,” said Laura Huffman, the ... native fish, and they are **eaten** only by sharks — or larger lionfish.

<https://www.washingtonpost.com> › news › 2015/02/23 ⋮

The dirty dozen: 12 of the most destructive invasive species in ...

Feb 23, 2015 — For some animals, there's no such thing as a dog-eat-dog world. They rule. Animals from around the world that stow away in airplanes, ships ...

<https://www.washingtonpost.com> › national › 2014/10/19 ⋮

Divers try spoon feeding lionfish to sharks, a method that ...

Oct 19, 2014 — Spoon-feeding lionfish to sharks could teach them to **eat** the problem fish — or, some say ... Can we eliminate **invasive species** by **eating** them?