

Genetic Identification of Commercially Sold Seafood in Fairbanks' Sushi Restaurants

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Background

- Seafood fraud is rampant worldwide
- From 1987-1998, 37% of fish species sold in the USA were mislabeled¹.
- The use of common names that could encompass several species (e.g., tuna) creates confusion.
- Seafood fraud has implications for human health (e.g., mercury content, parasites, forced labor) and consumer trust.
- Seafood mislabeling is also detrimental to the management and conservation of wild fish stocks.
- DNA barcoding is a useful tool for species identification and fraud detection.

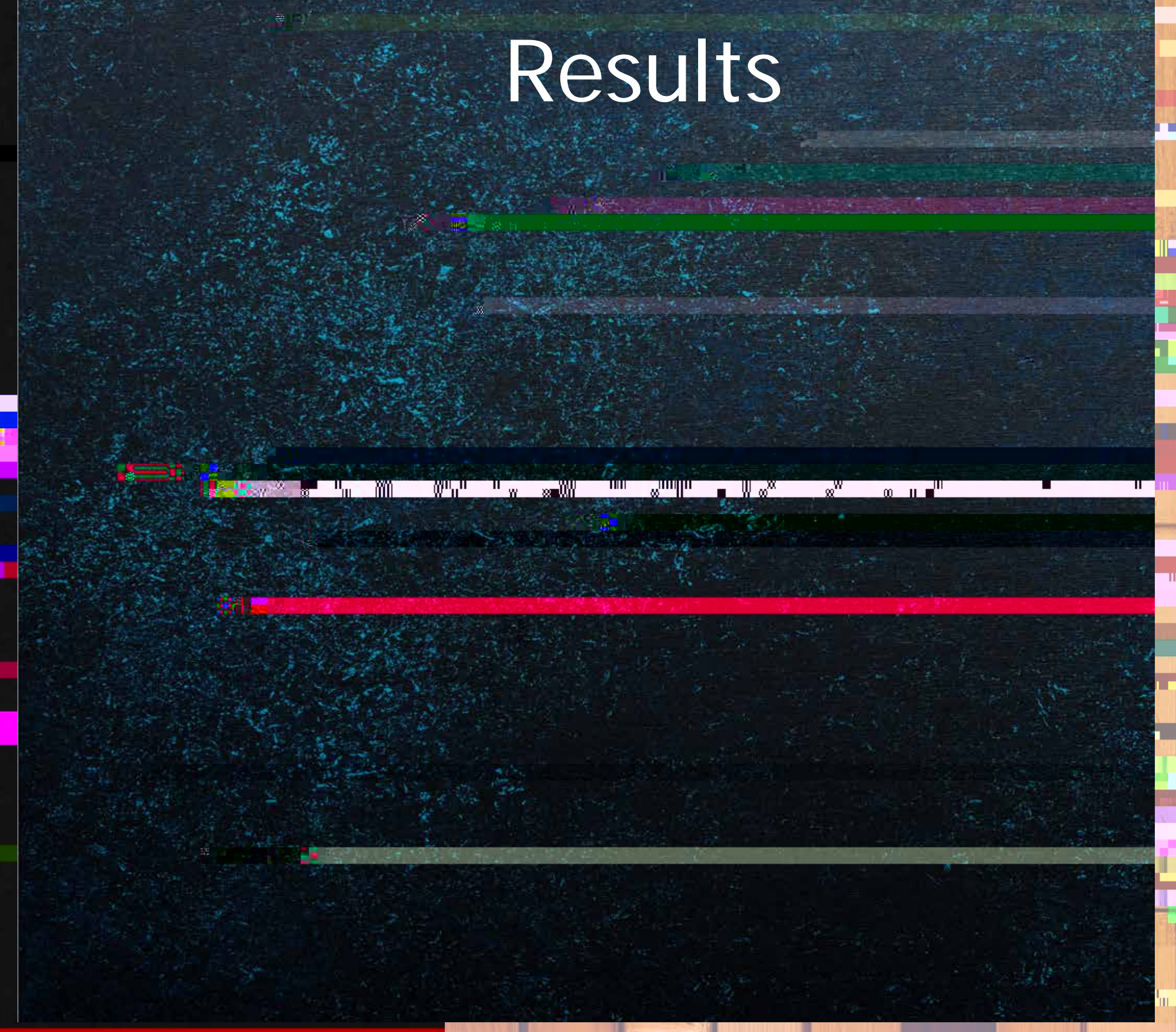
Methods

- We sequenced 48 samples of sashimi from seven restaurants in Fairbanks, AK during 2022-2023.
- We used Sanger sequencing to target the mitochondrial DNA cytochrome oxidase I (COI) gene, AKA the "barcoding gene."
- Sequences were processed and quality checked



Tobiko flying fish roe

Results



Implications

