

Promoting commercial fishing of Round Goby in the Baltic Sea through human and pet food development

If you can't beat them, eat them!

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AS TFTA



▶ TFTA is a privately owned research organization with a mission to **accelerate food and biotech innovation**

▶ TFTA is an **Evaluated R&D Institution**

▶ **Our vision:**

innovative food technologies that are sustainable and support health

scalable solutions for a better future



Experience
20+ years



100
Employees



Global
market



Round goby – invasive resource for valorization!

2002 – first round goby catch in Estonia

2012 – round goby made it to newspaper!

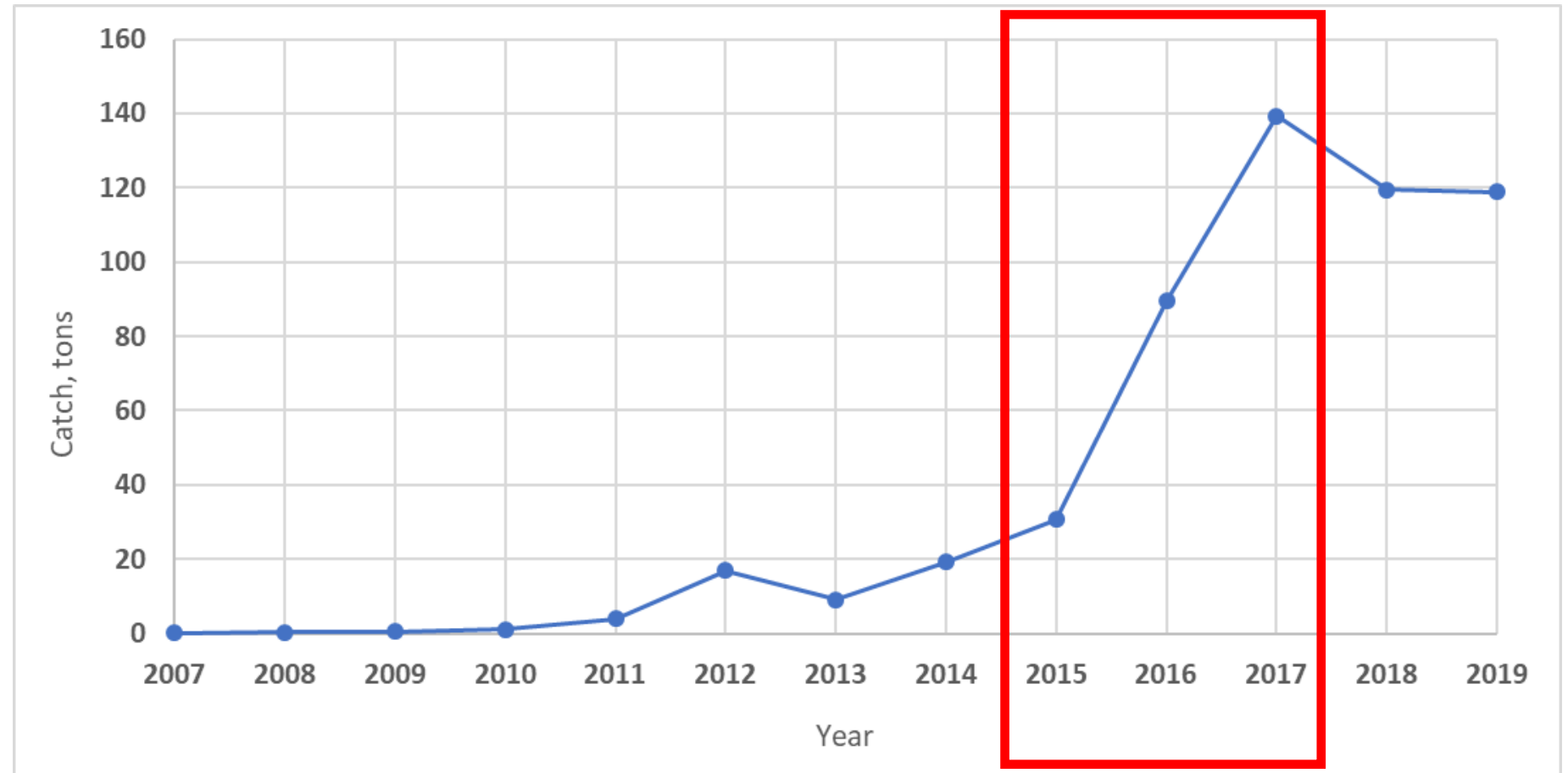


Lapsepõlves rääkis vanaisa muinasjutte merekoletistest, nüüd on nad siin...

In my childhood, Grandpa told fairy tales about sea monsters — now they are here.

First Round goby valorization study in Estonia

► 2018 - 2019



Tested processing methods

1. FILETTING

- Frying of filets

2. BREADING

- Filets and carcass

3. MARINATING

- Carcass – tomato and vinegar

4. SMOKING

- Carcass

5. MINCED MEAT

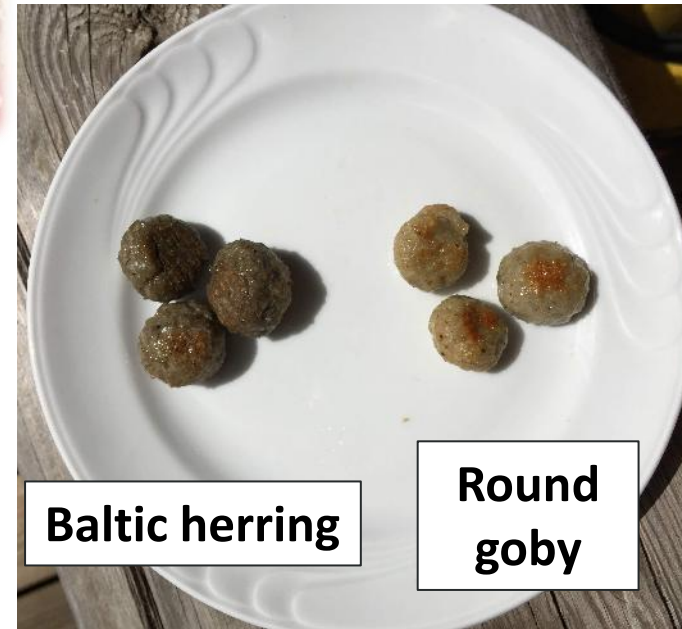
- Fish balls, fish sticks

6. MEAT SEPARATION

- Fish balls, fish sticks



Tasty meat!

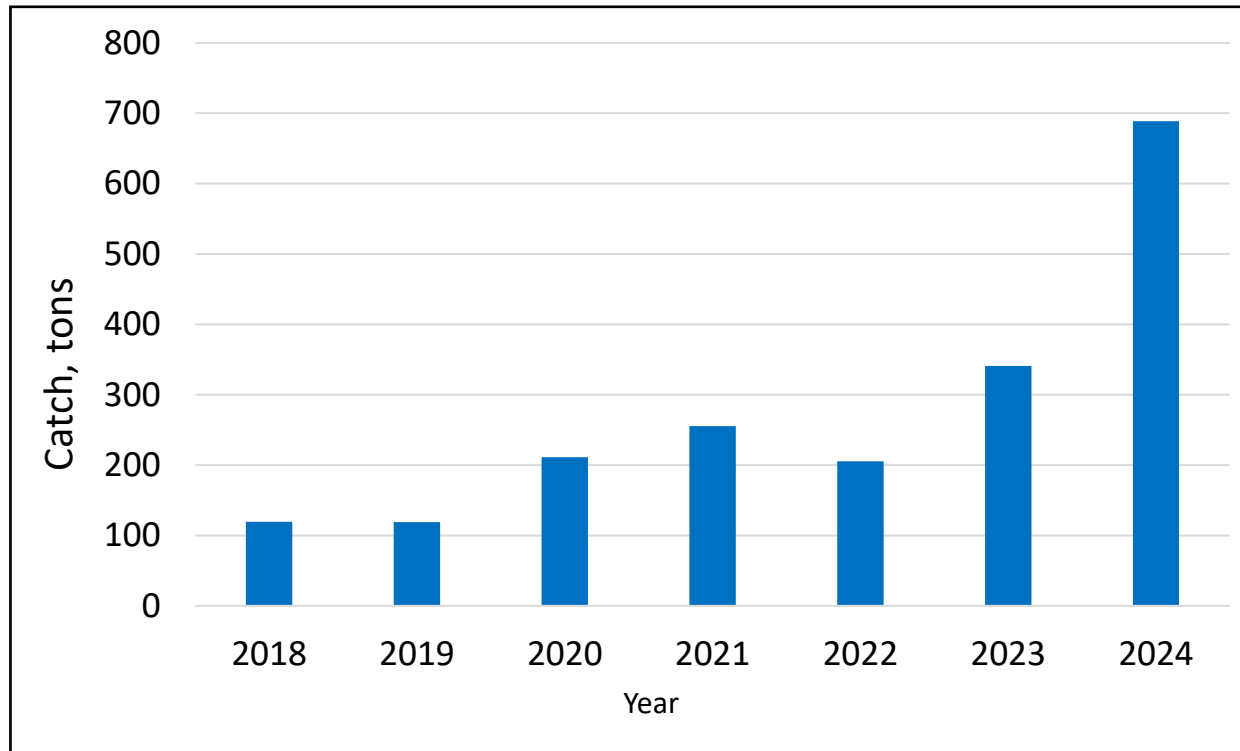
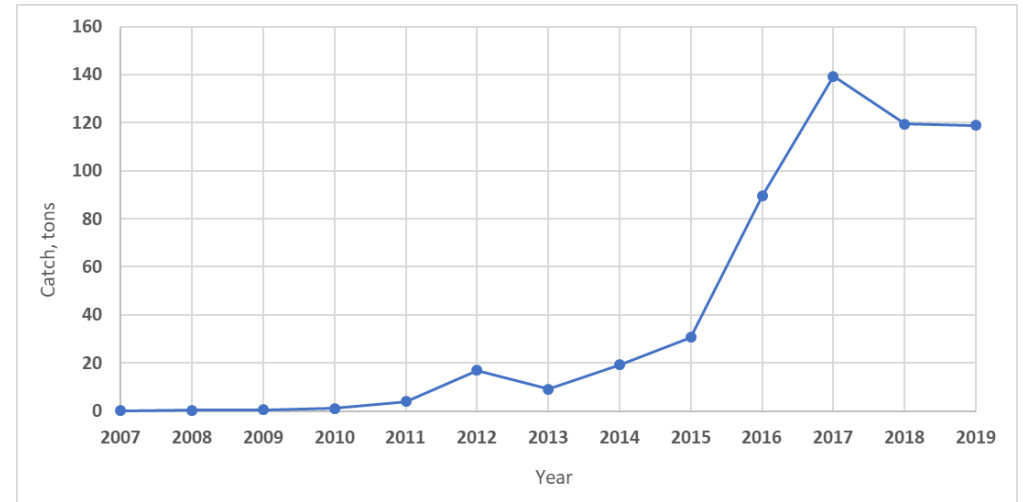


Baltic herring

Round goby

Next steps

- ▶ COVID-19 pandemic
- ▶ Slight decrease in catch starting from 2018
- ▶ Monitoring of situation



First sale price:
2017 – 0,48 €/kg
2024 – 1,16 €/kg

Baltic herring – 0,39
€/kg

RoundGoby – *if you can't beat them, eat them*

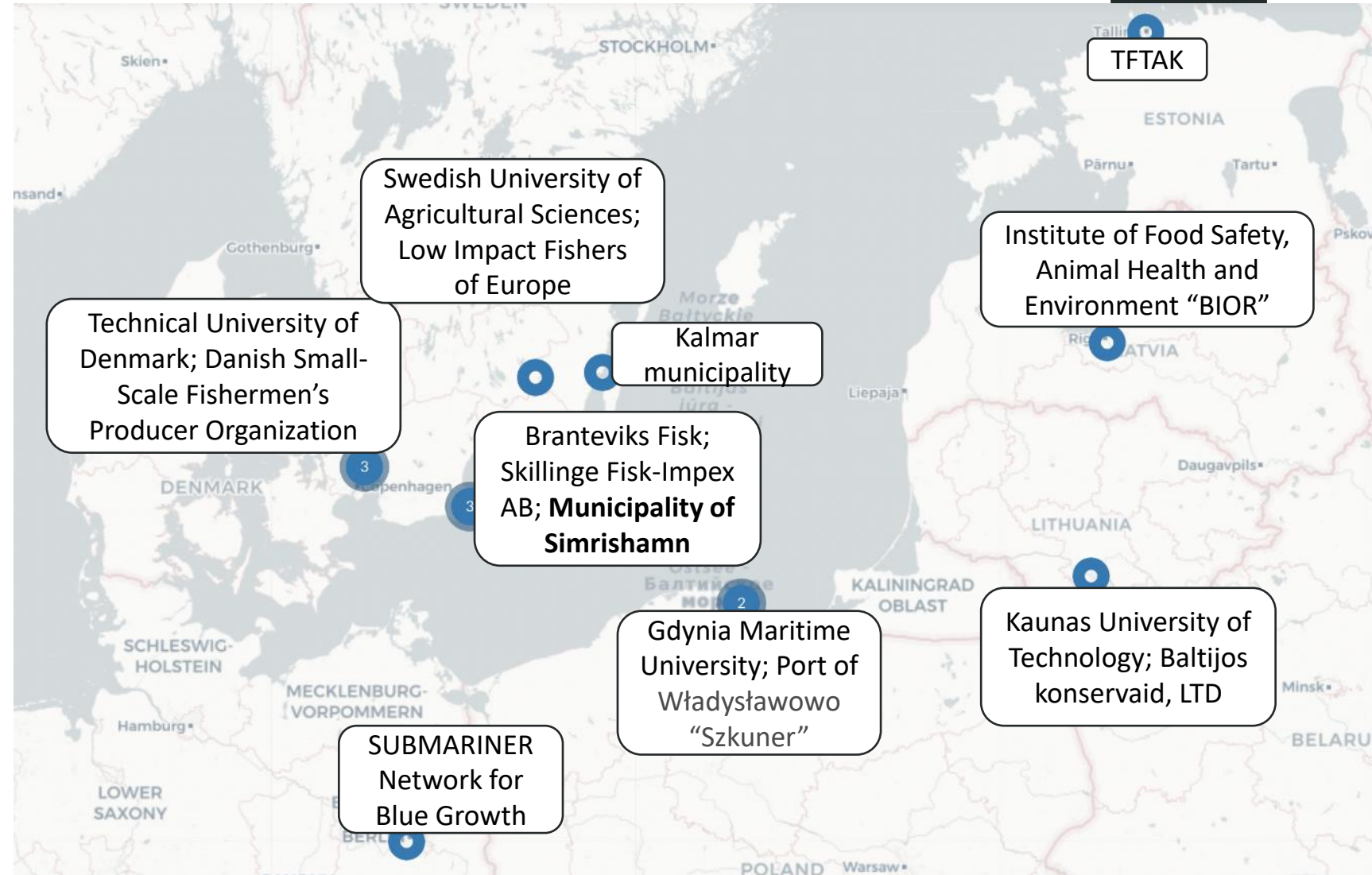
15 partners

7 countries

The **aim** of the project is to

*Promote fishing of Round Goby in the Baltic sea through exploring **management options**, developing jointly approved **fishing methods** and **report systems**, as well as showcasing how we can **produce high value products** for local market*

1/11/2023-31/10/2026



Round goby for dogs and cats

WHY

- Round goby is not consumed locally
- No automatic solutions for filleting round goby
- Small fish are especially difficult to use for human food



WHO

- TFTAK in scope of project Interreg (GoA 1.2)
- Pala Petfoods
- Petbit
- Pandivere L.T (part of VAFO Group)
- Pets and pet owners – consumer study in Autumn 2025

WHAT

- Low temperature cooked raw snacks
- Freeze-dried raw snacks
- High temperature cooked cookies



Low temperature cooked raw snacks

💡 Round Goby has less than 1% fat in its body composition

💡 Approx 30-40% of dogs are **overweight**

Round goby has a good potential to be used in low fat treat!

I Lab bench trials

	%
Round goby	82
Carrot	5
Pumpkin	5
Cranberries	3
Green peas	3
Whole grain oat flour	2



Industrial test at Pala Petfoods

1

Whole fish and vegetables are crushed and well mixed together



2

A homogenous dough is processed



3

Long stripes are piped and dried in a convection oven



4

Quality check!



NORDIC RAW FOOD

FOR PETS

Pala

Industrial test at Petbit



- Fish bones add calcium, phosphorous and sodium into the product
- Important to ensure microbiological safety



Human food development



▶ Canned round goby products for human consumption (Kaunas University of Technology)

- ▶ 'Classical' formulation (round goby, sunflower oil, tomato paste, starch, flavors)
- ▶ Formulation with Ulva seaweed (added Ulva seaweed)

▶ Raw material preparation for the chefs



Recipes for public kitchen and restaurants



Ceviche (lime, chilli, tomato, cucumber, coriander)



Panko-fried fish fillets with root vegetables and herb sauce



Round goby fillets with boiled potatoes. Served with white wine sauce



Fish patties

Follow our journey!

▶ SUBMARINER Network **Sustainable Fisheries Working group**

- ▶ Held twice a year, spring and autumn
- ▶ Focus on coastal fisheries management and results concerning round goby



- ▶ Register for upcoming **consumer studies** (only in Estonian)

<https://interreg-Baltic.eu/project/roundgoby>



Thank you!

Contact

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