

**Sustainable Food Information Seminar**  
**Sauðárkrókur, 14 June 2007**

**Long-line Fishing and  
Sustainability**

- Erla Pétursdóttir, Vísir Ltd.

A stylized silhouette of a mountain range in shades of teal, located at the bottom right of the slide.

# Summary

- ◆ Background
- ◆ Sustainability in long-line fishing
  - Environmentally friendly
  - Biologically responsible
  - Profitable
- ◆ Electronic tracking system at Vísir

# Erla Pétursdóttir - Background

- ◆ B.A. in Economics
  - St. Paul, Minnesota, USA
- ◆ 3 years experience in Energy Supply Management
  - Minneapolis, Minnesota, USA
- ◆ Recently joined Vísir Ltd. for a special project in Canada

# Vísir Ltd. - Background



- ◆ Formed in 1965
- ◆ Medium-sized, family-owned fishing and fish-processing company
- ◆ Adapted to quota system mid-life
- ◆ Five long-liners
- ◆ Operations in all four corners of Iceland

# Vísir Ltd. – Long-liners



- ◆ Five specialized long-liners
- ◆ Baiting machines on-board
- ◆ 60 km of line & up to 55,000 hooks
- ◆ Bait is mackerel, herring, squid pieces or factory-made sausage

# Operations in all four corners of Iceland



# Vísir Ltd. – Operations

- ◆ We consider Iceland to be one fishing station
- ◆ The catch is standardized but the operation at each location is specialized

# Vísir Ltd. – Operations (cont'd)

- ◆ Specialized processing centres:
  - Grindavík: salted splitted fish
  - Djúpivogur: salted fish fillets
  - Húsavík: fresh and frozen portion fish
  - Þingeyri: frozen whole fillets

# One Boat on the Road

- ◆ Vessels fish where largest number of fish and best fish are located
- ◆ Vessels unloaded in nearest harbour
- ◆ 50% of catch transported overland




# Quota Allocations

- ◆ The Icelandic Directorate of Fisheries allocates quota annually, based on scientifically backed rules and catches
- ◆ Vísir evaluates how best to use the allocation during the year

# Allocated Quota for 2006/2007

Species	% of TAC	Quota (Kg.)	Cod Equivalence Rate	Cod Equivalence
Cod	5,139%	7.947.541	1,00	7.947.541
Haddock	5,869%	4.943.580	0,81	4.004.300
Saithe	1,948%	1.271.470	0,42	534.017
Redfish	0,975%	555.743	0,69	383.463
Ling	16,639%	665.904	0,60	399.542
Tusk	46,067%	2.073.142	0,37	767.063
Catfish	7,238%	764.496	0,71	542.792
Other		387.978		410.316
<b>Groundfish Total</b>		<b>18.609.854</b>		<b>14.989.034</b>

# Long-line Fishing

- ◆ Environmentally friendly
  - ◆ Biologically responsible
  - ◆ Profitable
- 
- A decorative silhouette of a mountain range in a darker shade of teal, located in the bottom right corner of the slide.

# Long-line: Environmentally Friendly

- ◆ Stationary fishing gear
  - No damage to ocean floor
- ◆ Low fuel requirements
  - Less carbon dioxide released into the atmosphere

# Long-line: Biologically Responsible

- ◆ Many age groups are caught with long-line
  - Results in a various-size catch
- ◆ Long-line catches a range of species
- ◆ Stable catch throughout the year
  - No extremes in catch amounts

# Long-line: Profitable

## ◆ Technology

- Baiting machine
- Larger boats, more hooks, etc.

## ◆ Management

- Control catch amount throughout the year (fishing and processing aligned)
- Maximize weight per hook and yield of catch
  - ◆ Less energy used to catch the quota
  - ◆ Less overhead

# Electronic Tracking System at Vísir

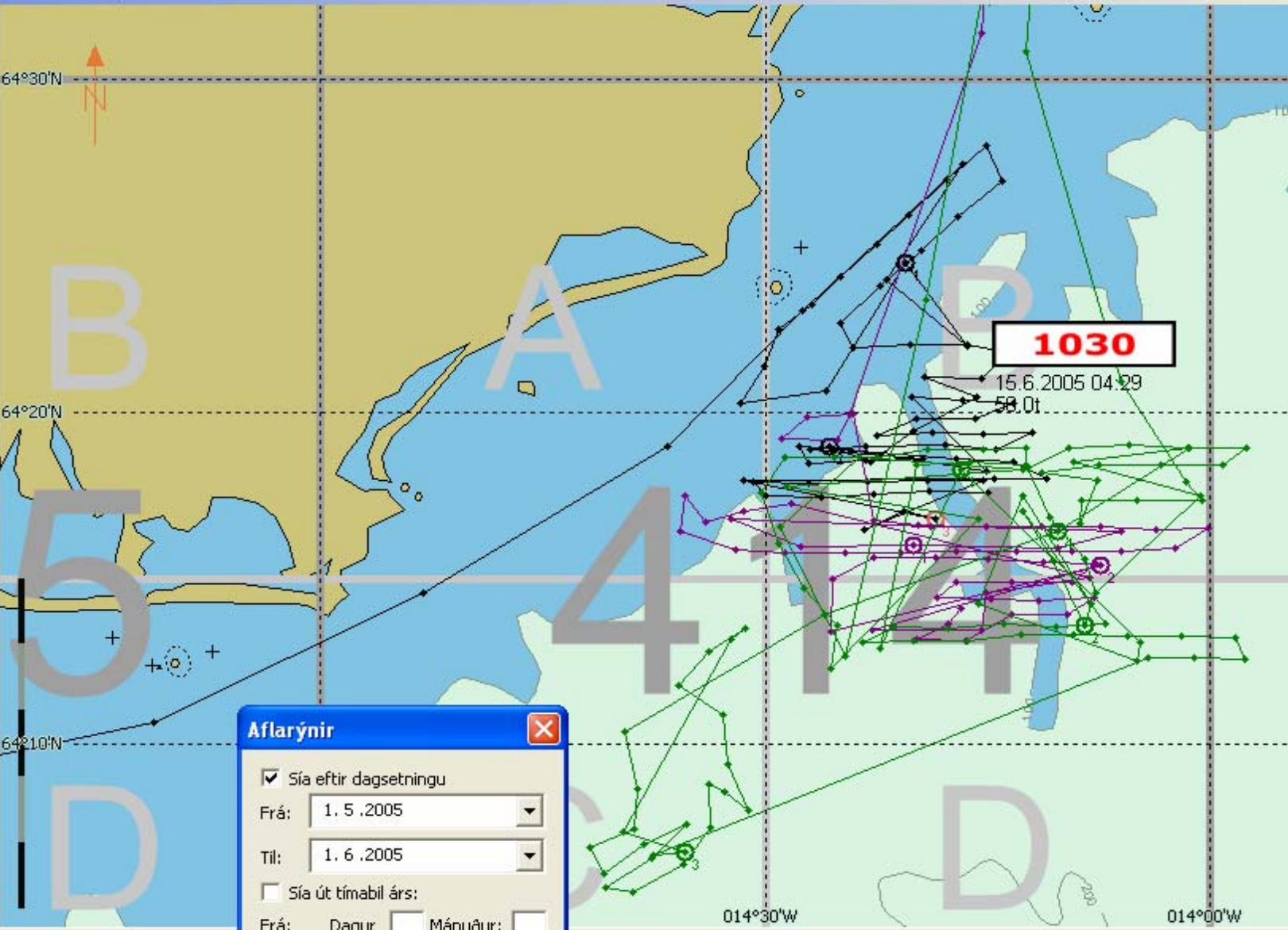
- ◆ Used this system for last 3 years
- ◆ Have data from 1996
- ◆ Communication between three systems
  - On-board the vessels
  - In operations
  - Sales

# Electronic Tracking System at Vísir

- ◆ Recorded on board
  - Location (all routes of vessels)
  - Number of hooks
  - Number of fish
  - Bait, type, amount
  - Depth, wave height
  - Weather, course, wind speed
  - Sea and air temperature
  - Type, amount and size of fish estimated (recorded after unloading)
- ◆ Recording on land
  - Size, utilisation, quality, worms, etc.

# Zoom-in Pathway (Analyse the Day)

Mercator · 1/250 000 · WG584



Consultation

Færsla : 3

Skip : Páll Jónsson

Veiðiferð : 38

Staðsetning : 64°16'790 N  
18'470 W

Tími : 23.5.2005 06:04:30

Vindátt : 045,0°

Vinhraði : 10 m/s

Dýpt : 55,0 m

Afli:

Þorskur : 9,455 kg

Ýsa : 2,588 kg

Keila : 960 kg

Steinbítur : 880 kg

Hlýri : 48 kg

Ufsi : 46 kg

Lúða : 15 kg

Langa : 6 kg

Samanlagt : 13,998 kg

-

Afli um borð:

Þorskur : 27,125 kg

Steinbítur : 3,760 kg

Ýsa : 5,998 kg

Keila : 1,920 kg

Hlýri : 48 kg

Ufsi : 46 kg

Lúða : 15 kg

Langa : 6 kg

Samanlagt : 38,918 kg

Aflarýnir

Sía eftir dagsetningu

Frá: 1. 5. 2005

Til: 1. 6. 2005

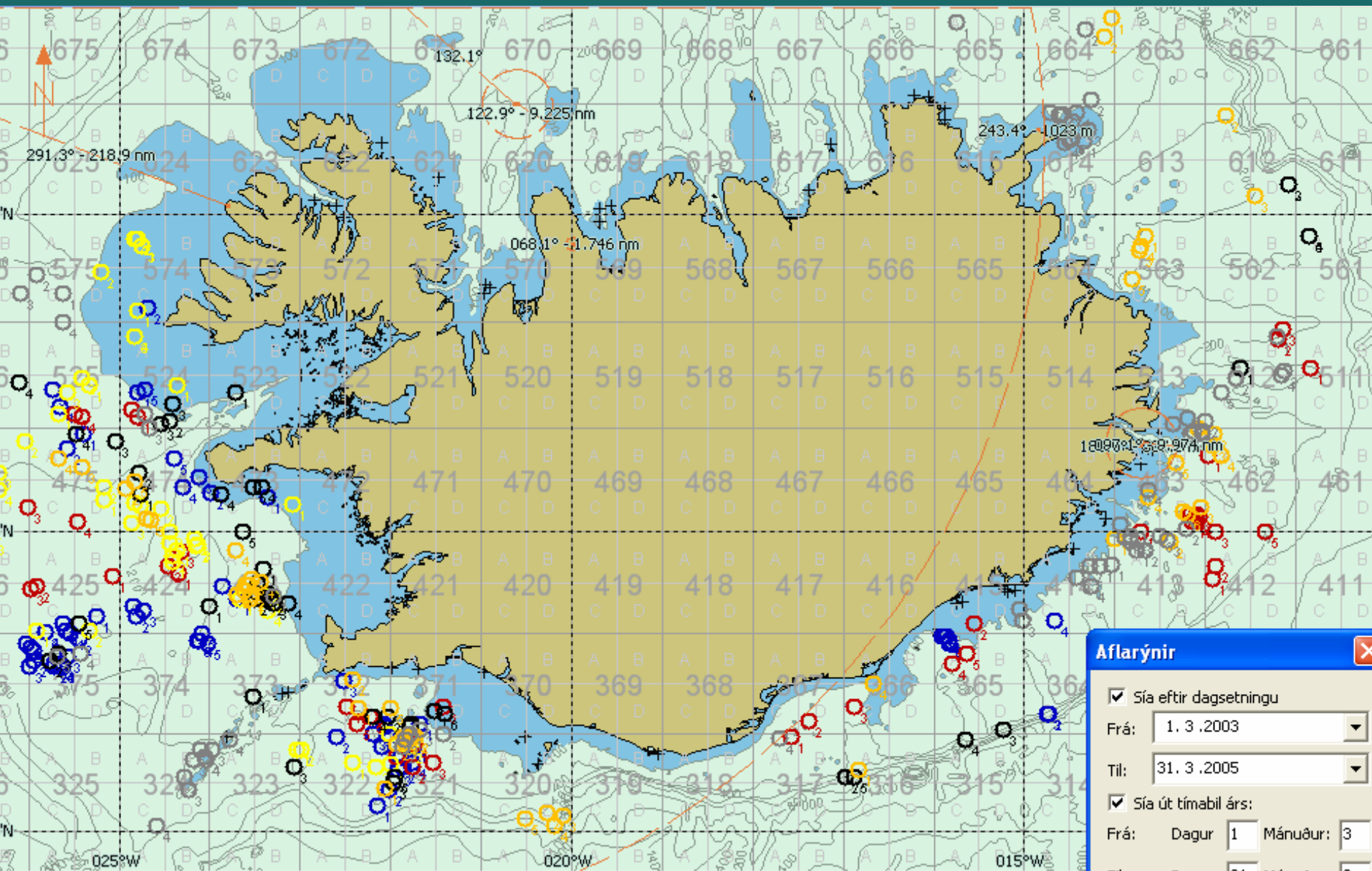
Sía út tímabil árs:

Frá: Dagur Mánudagur

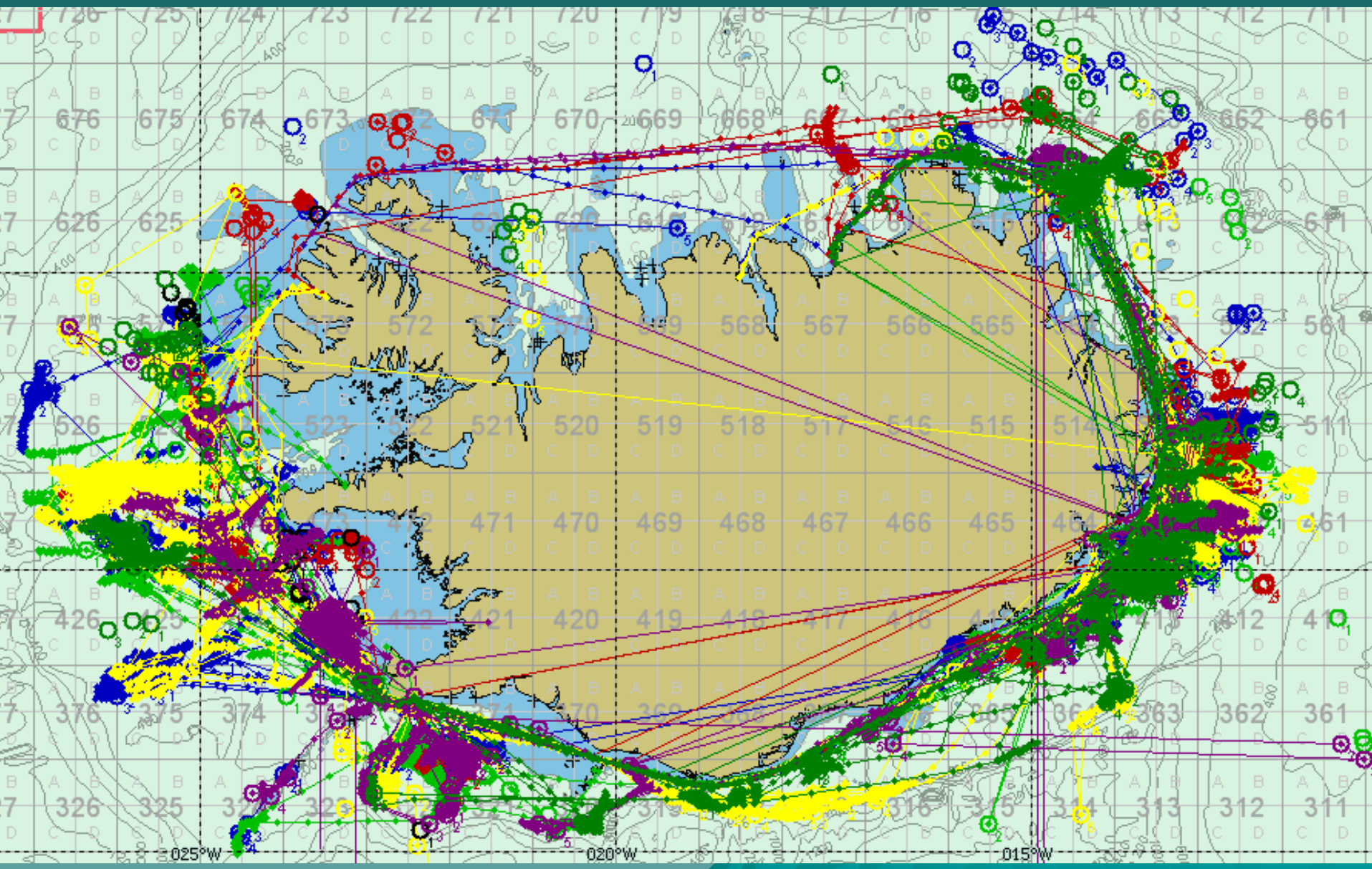
014°30'W

014°00'W

# March 2003-2005



# Pathway 2004 - Autotrack



# Electronic Tracking System at Vísir

- ◆ Tool for management
  - Trace product from fishing to customers
  - Track yield at each stage of process
  - Keep track of fishing areas
- ◆ System information can also be used to increase catch per hook
  - Where caught, with what bait, etc.
- ◆ That would result in fewer trips to get the quota
  - Less energy used to get the catch
  - Less disruption to the marine life

# Long-line Fishing and Sustainability

- ◆ Long-line fishing coupled with in-land processing is
  - Environmentally friendly
  - Biologically responsible
  - Profitable
- ◆ It is in our best interest to make sure that this natural resource is fished responsibly and long-line is a way to do just that

# Thank you

