

# Klimatförändringar & Polarturism; Student-On-the-Ice Antarctic expedition 2009 & 2011

Hans Gelter



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## Min Bakgrund

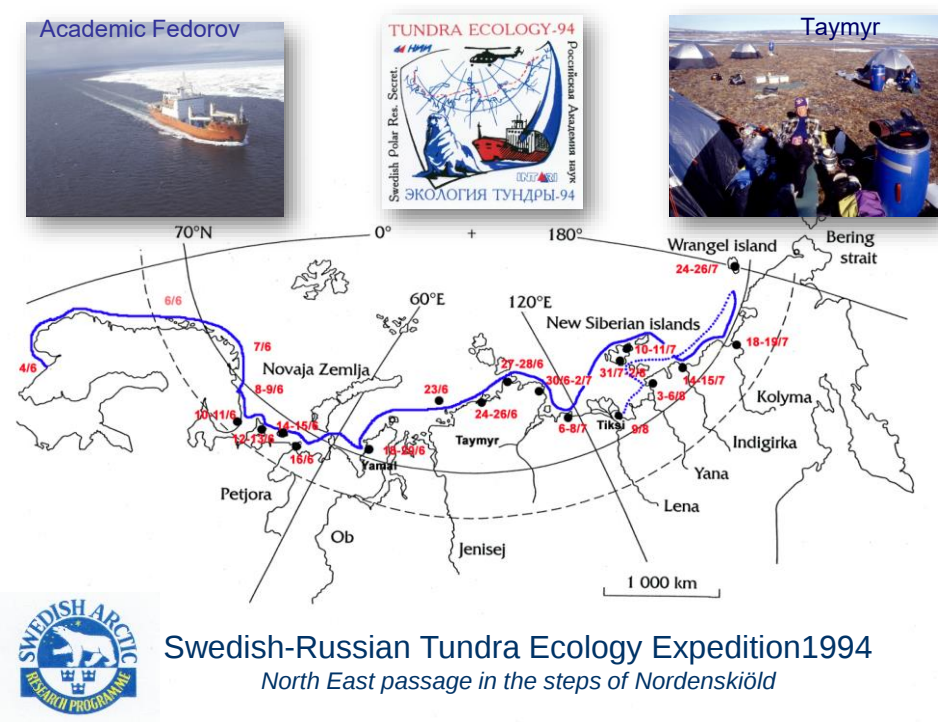
- Lektor & Programkoordinator Upplevelseproduktion, Inst. Musik & Medier. LTU
- Lektor Biologi, Inst. För Lärarutbildningarna, LTU
- F.Dr. Lektor, FoAss. Genetik Uppsala Universitet, Postdoc Queens University, Ontario, CA
- Skid- & Telemarksinstruktör, Ledare fjäll, LFS, MTB, Klättring inom Friluftsrämjandet
- Alpin Expeditionsledare (Himalaya, Alai-Kirgistan)
- Naturguide & Reseledare åt TEMA resor (Safari Tanzania, Trekking Nepal, Österrike, Madeira, Cypren, Samos)
- Egen företagare inom naturguidning, föredrag, utbildning
- Klimatambassadör SNF



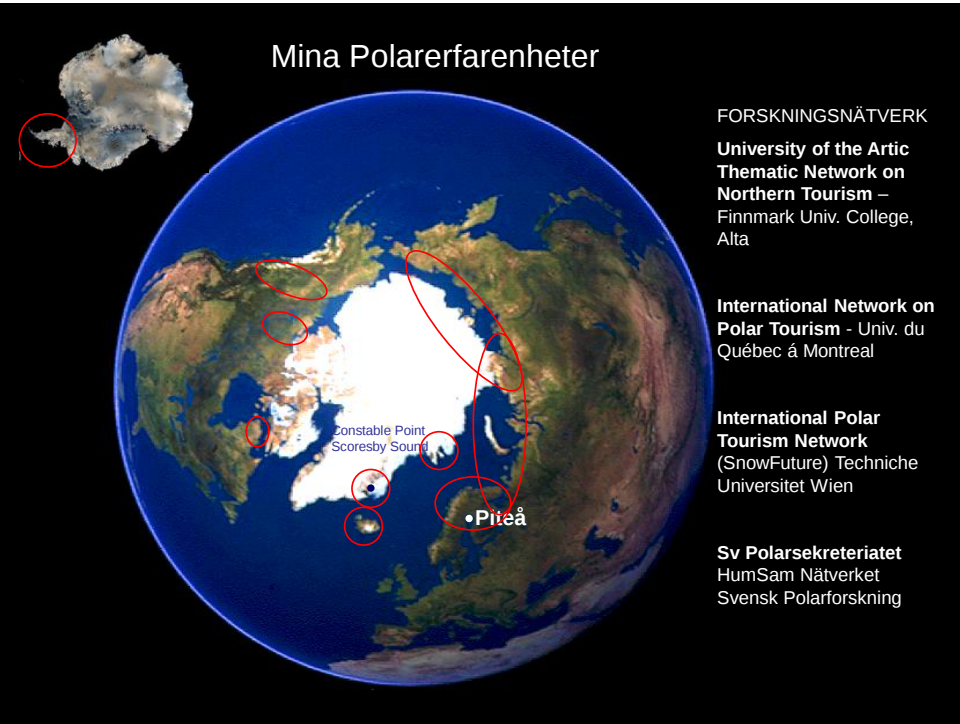
Guide NATURA



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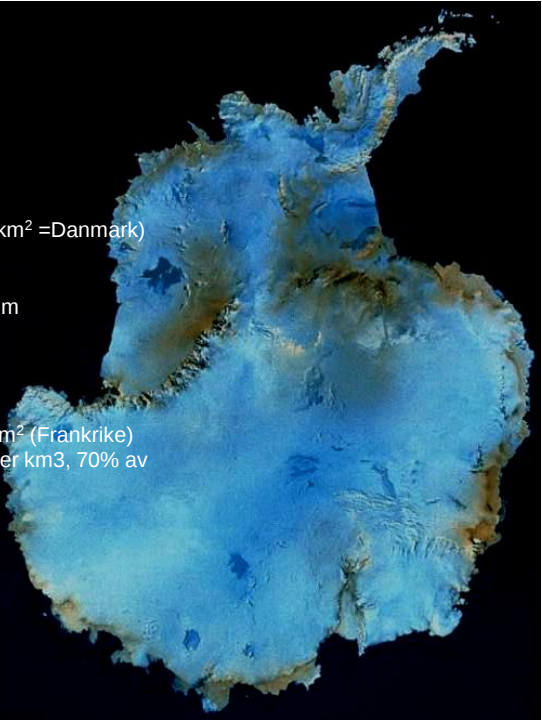
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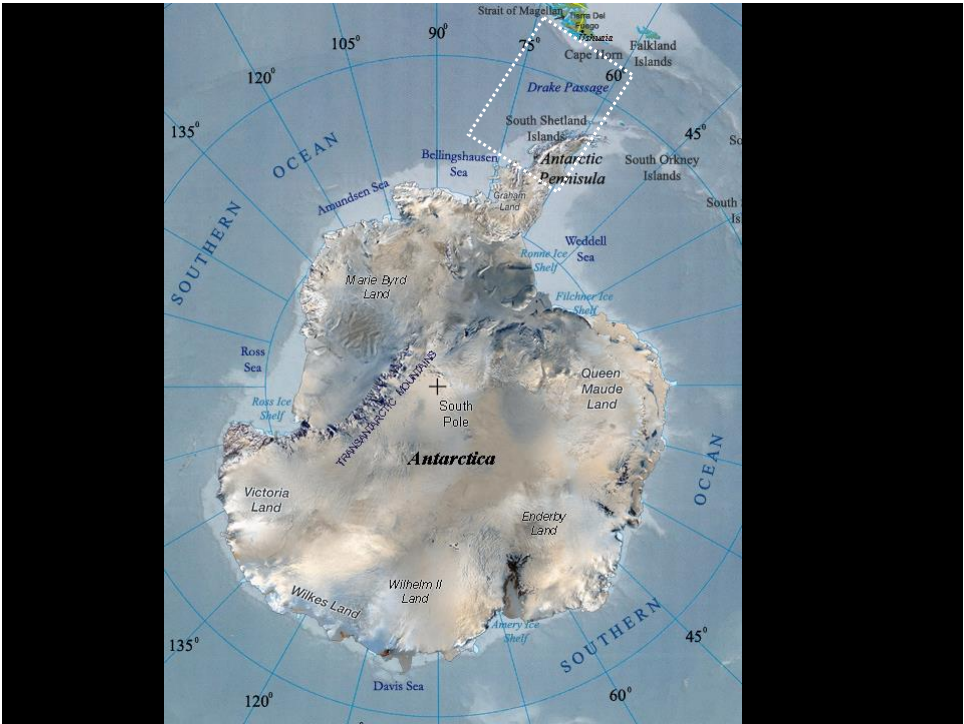


### Kul fakta Antarktis:

- Population: 3000 (vinter 1500)
- Turister (07-08): 46 0912
- Lågsta temp: -89,6°C (Vostok Station)
- Isfritt land: 0,4% av landmassan (44 890 km<sup>2</sup> =Danmark)
- Högsta höjd: 4900 (Vinson Massif)
- Djupast fast mark: -2555m u h
- Isvolym: 28 millioner km<sup>3</sup> = havsnivå +70 m
- Medelhöjd: 2194m
- Högsta berg: Mt Jackson 3184m
- Isens medeltjockleken: 1829m
- Maximala isdjupet: 4776m (Dome C)
- Största is shelf: Ross Ice Shelf 487 000 km<sup>2</sup> (Frankrike)
- Isen utgör 90% av världens is - 28 miljoner km<sup>3</sup>, 70% av världens färskvatten



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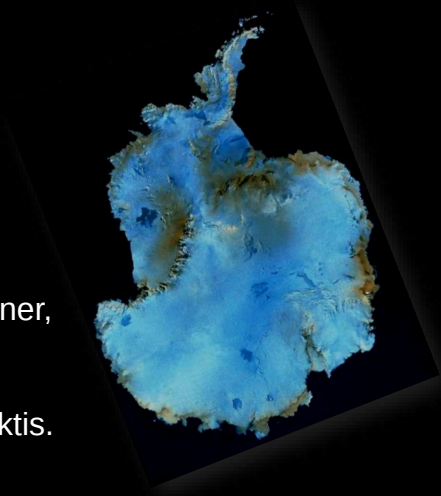


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# Antarktis

Den minst besökta kontinenten.

År 2000 hade bara 200 000 personer,  
– upptäcksresande, äventyrare,  
forskare, underhåll- & logistik  
personal och turister besökt Antarktis.  
(Bauer 2001)

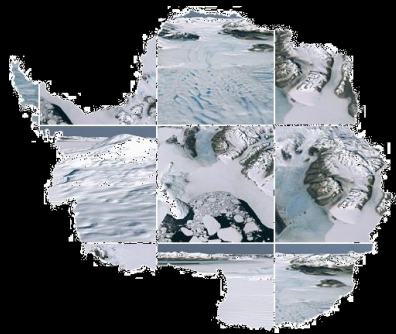


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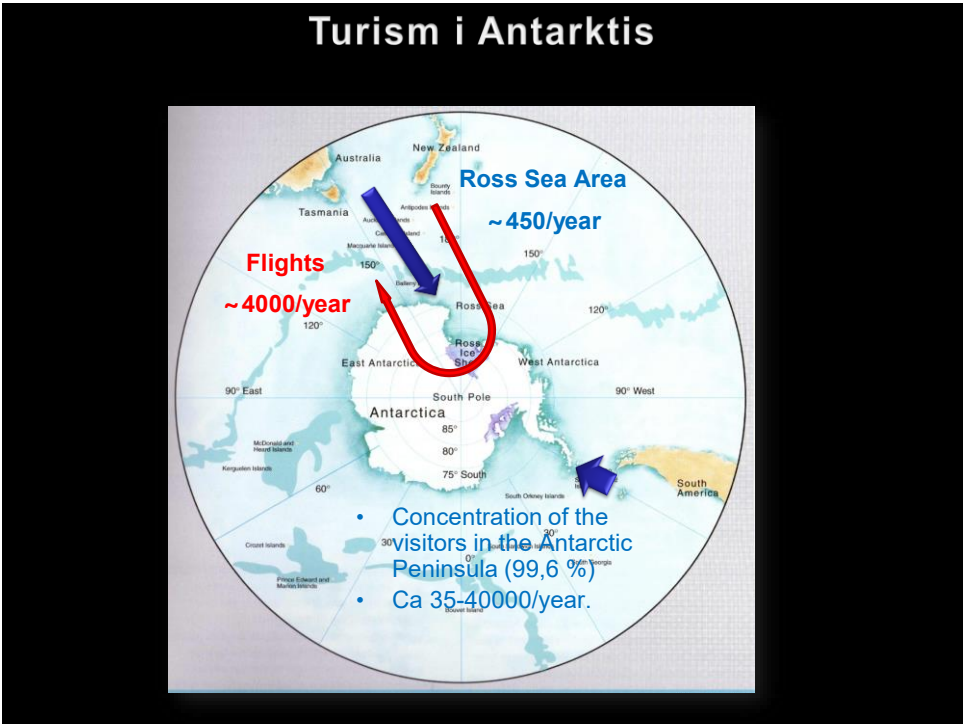
# Antarktis

Historiskt ekonomiska  
aktiviteter i Antarktis:

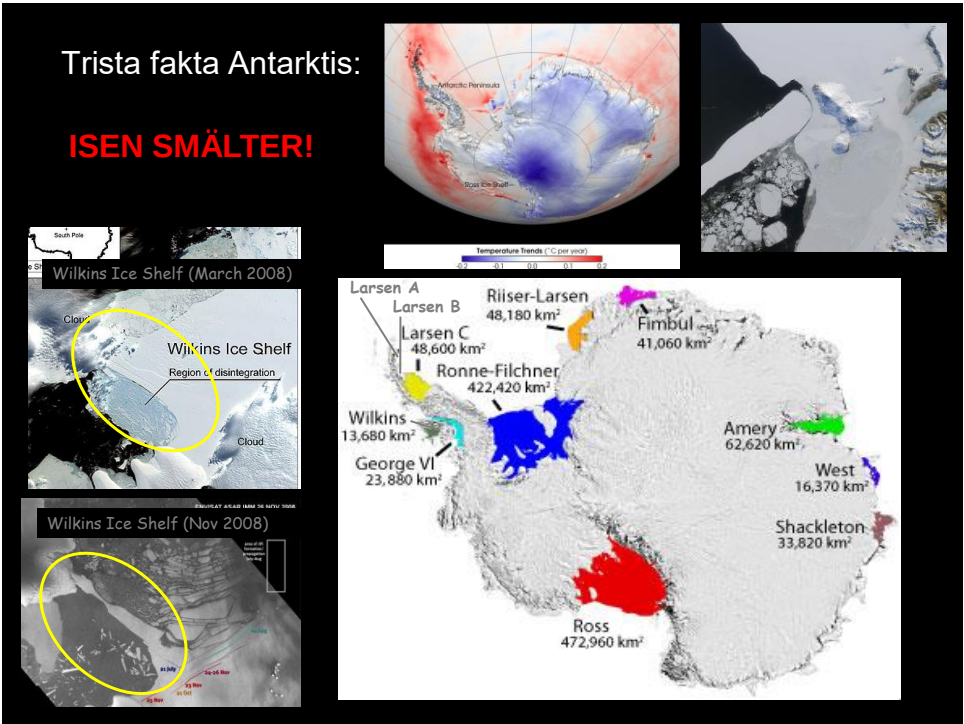
- Säljakt
- Valjakt
- Fiske
- Forskning
- **Turism**



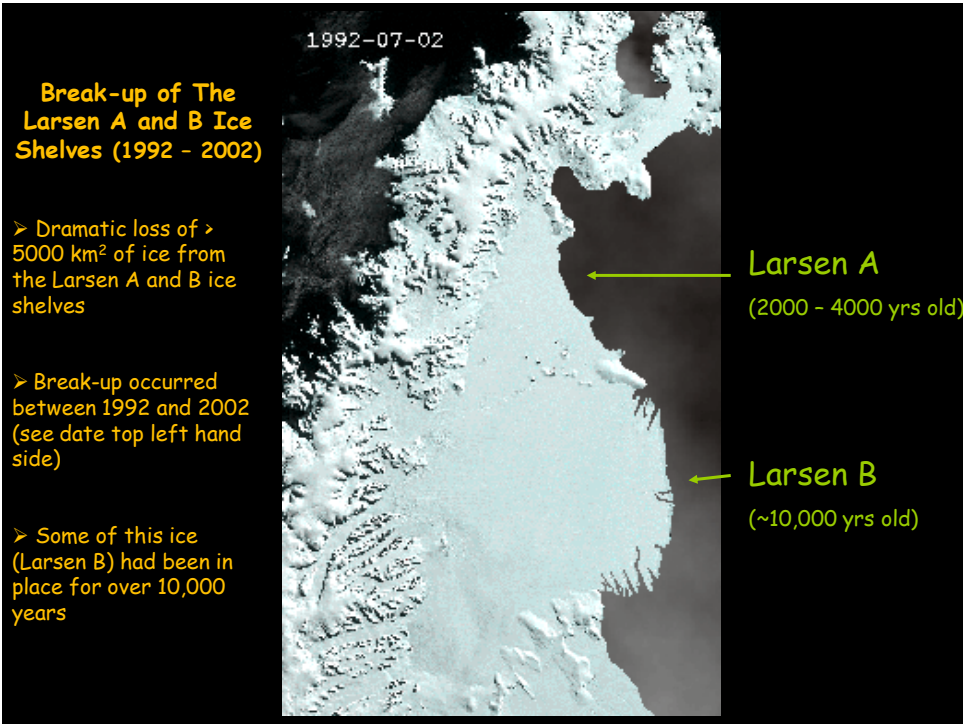
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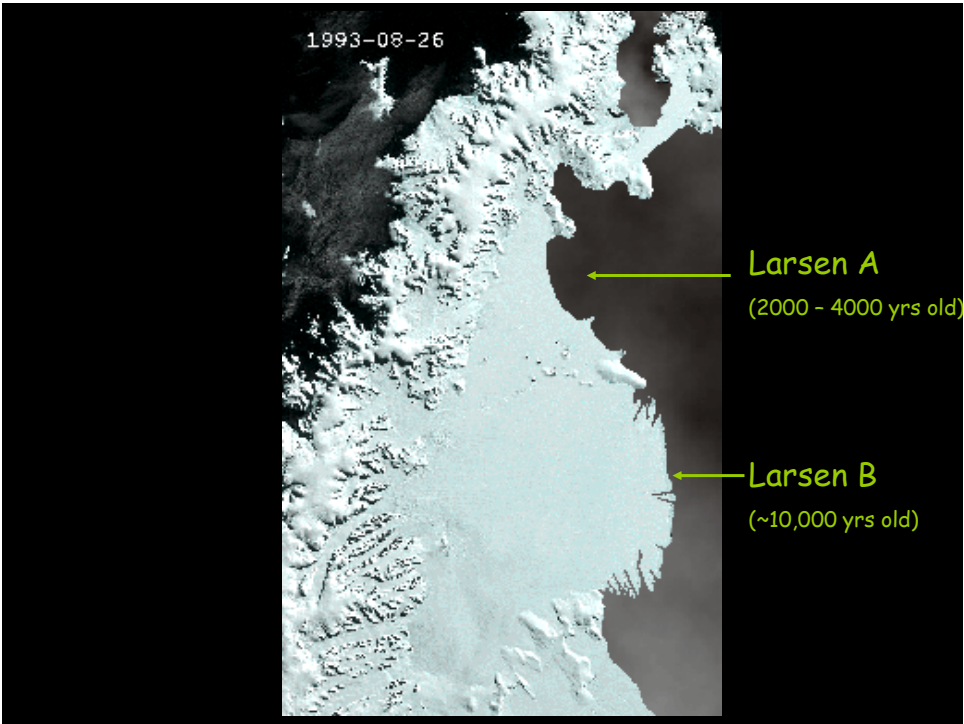
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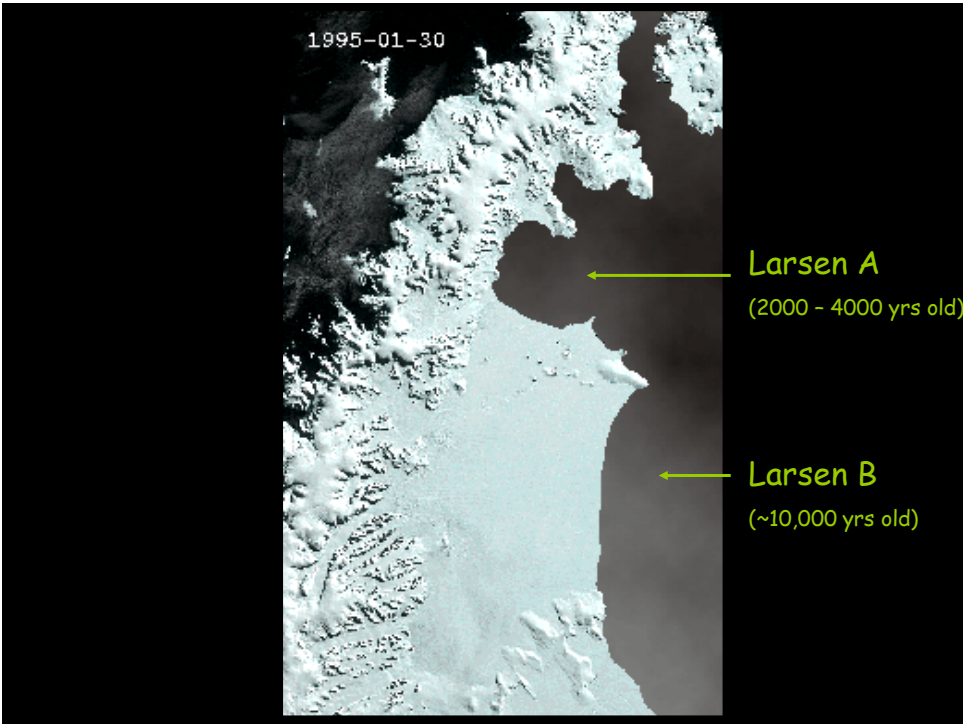
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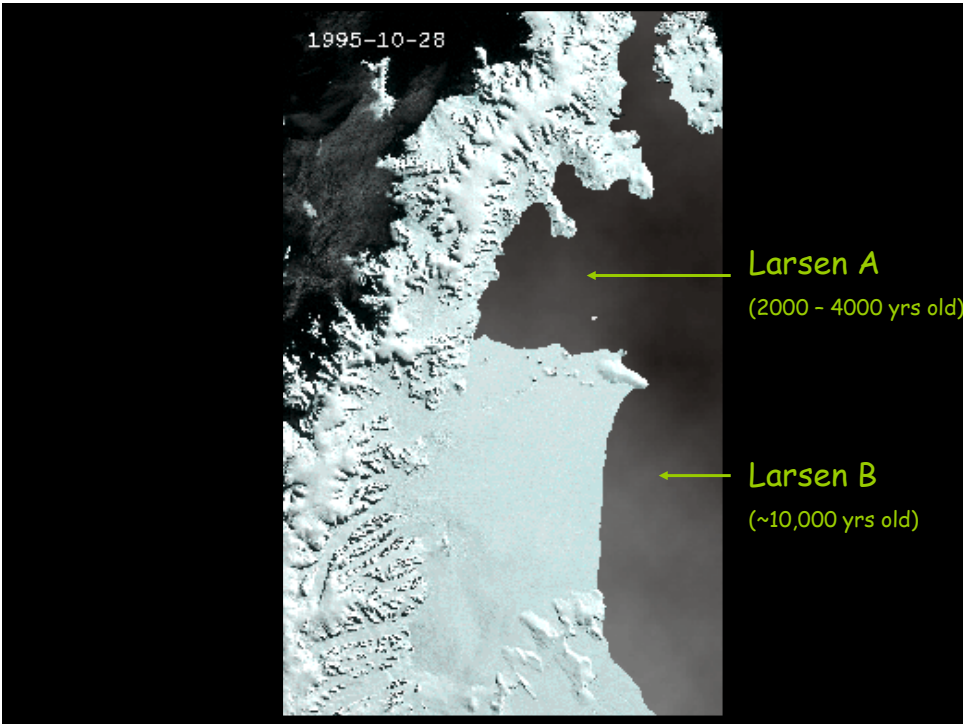
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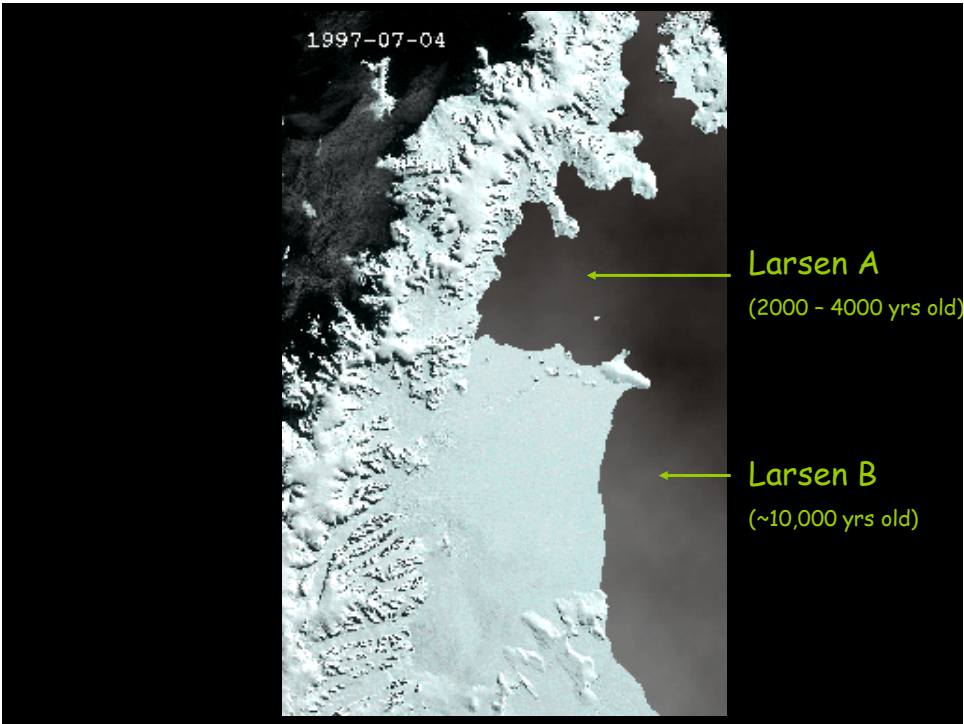
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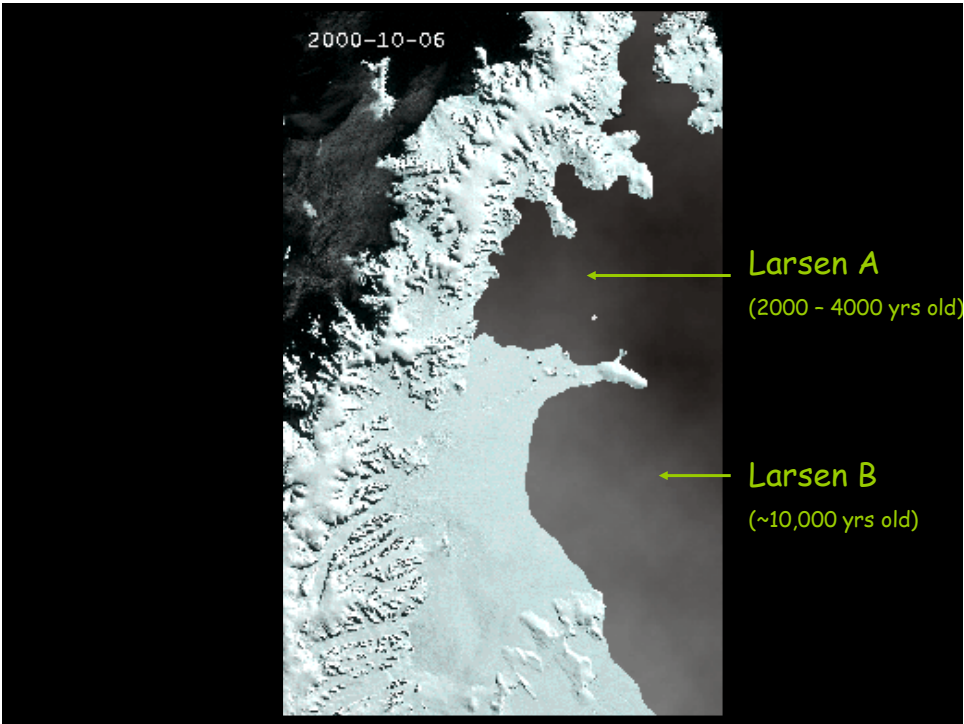
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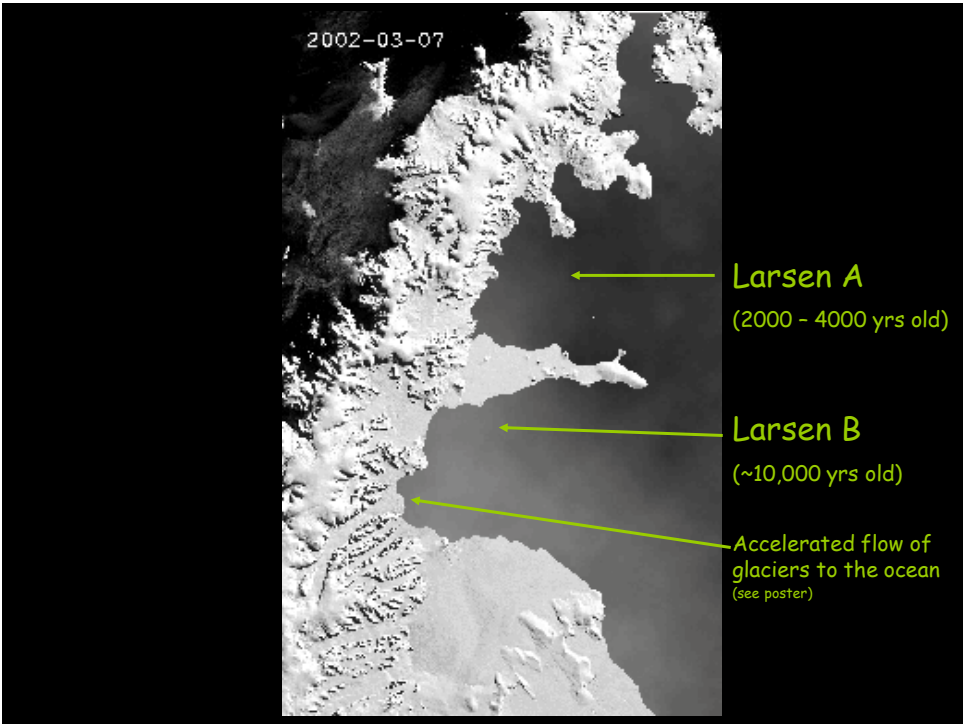
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**Antarktisk turism:**

- 430% ökning i kryssningsbaserad turism senaste 14 åren
- 757% ökning i landbaserad (landningar) turism aktivitet
- Begränsad infrastruktur för turism (rescue)
- Ingen formell (internationell) reglering
- Farhågor för miljöpåverkan



Antarctic Explorer 2007





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# SOI University Antarctica Expedition 2009 & 2011

Protect the Poles - Protect the Planet

Join the first ever university expedition to Antarctica

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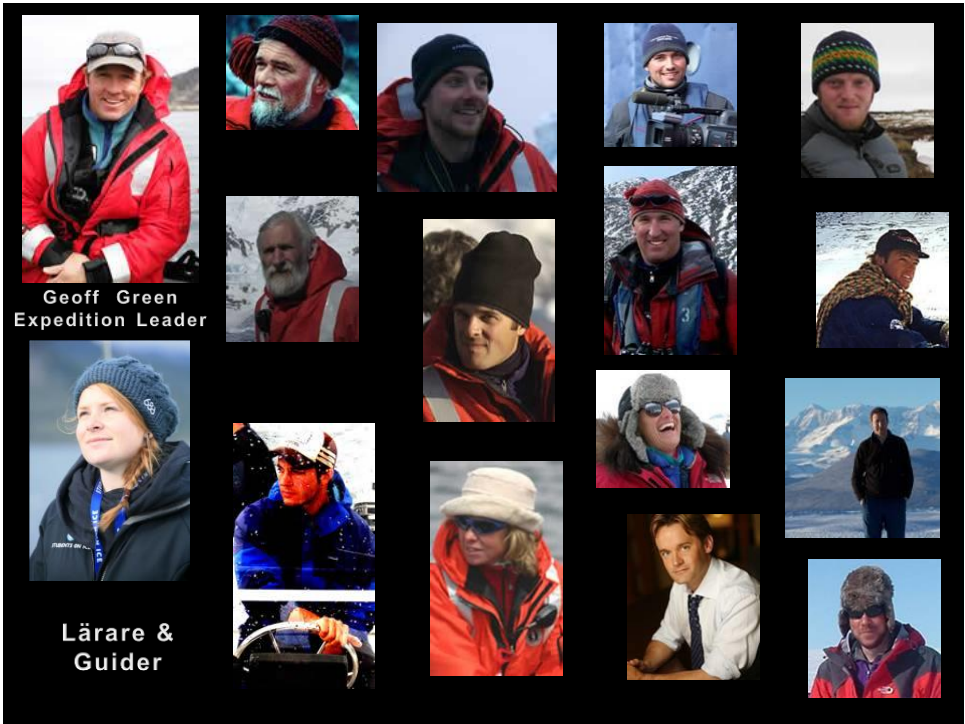
## Student-on-Ice University Antarctica Expedition:

- 2009: 70 studenter, 20 guider/lärare
- 2011: 50 studenter, 30 guider/lärare

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Universitetskurser:  
2009: 3 st, 2011, 7st  
- **Polar tourism**  
- Glaciology  
- Human impact and climatology  
- Zoologi/ekologi

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Studenter i utbildning och forskning



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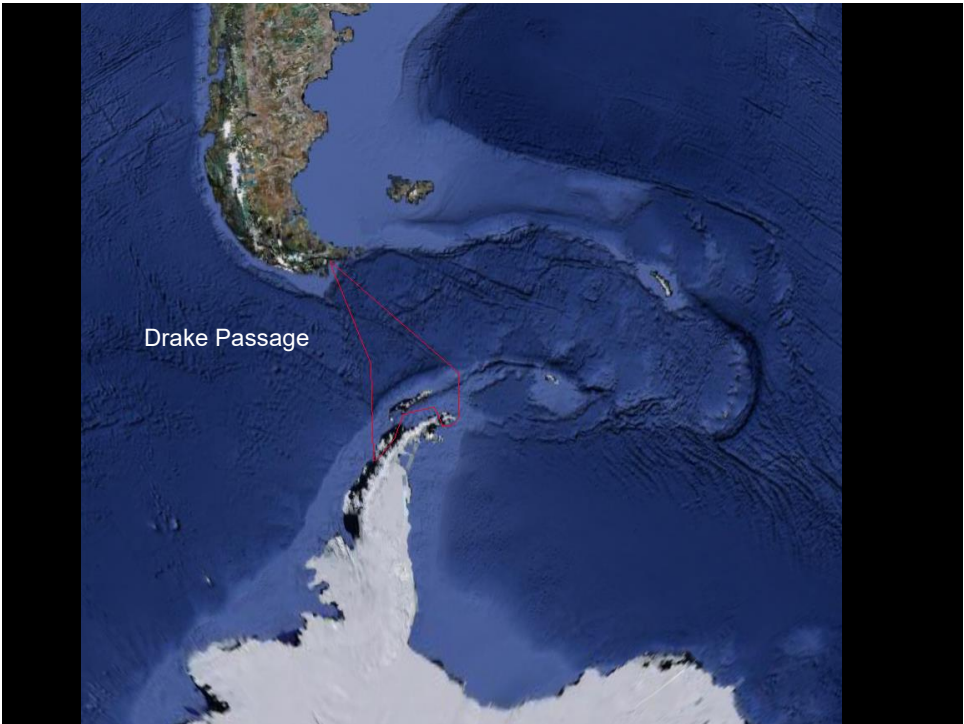
Tierra del Fuego  
Canal Beagle



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Drake Passage; Furious 50ies & Roaring 60ies



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Drake Passage; Furious 50ies & Roaring 60ies



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Drake Passage – home of the Albatross



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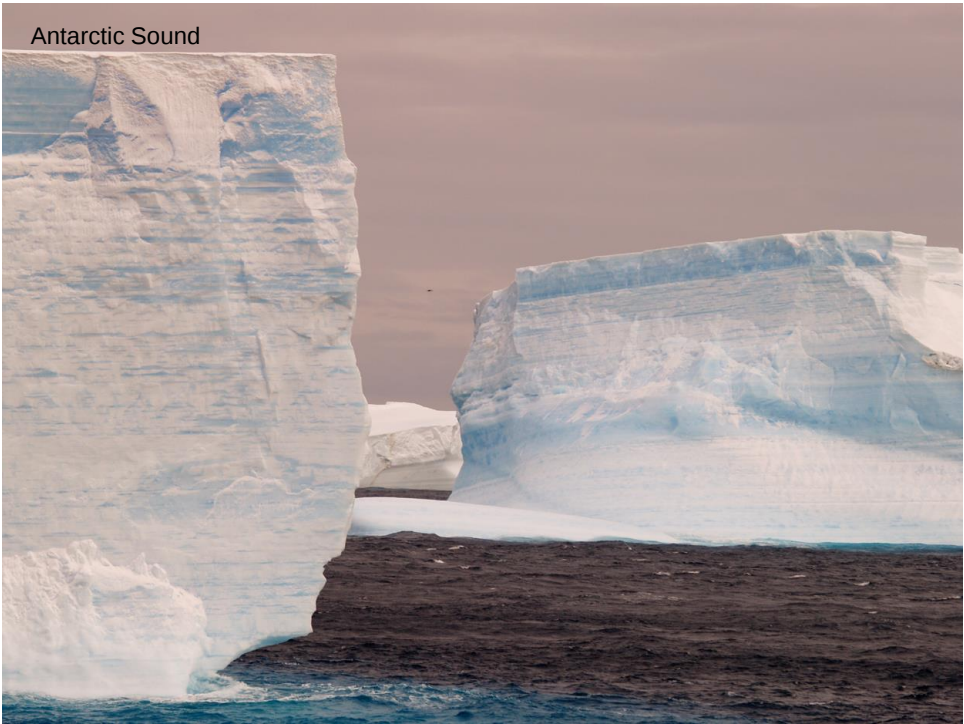
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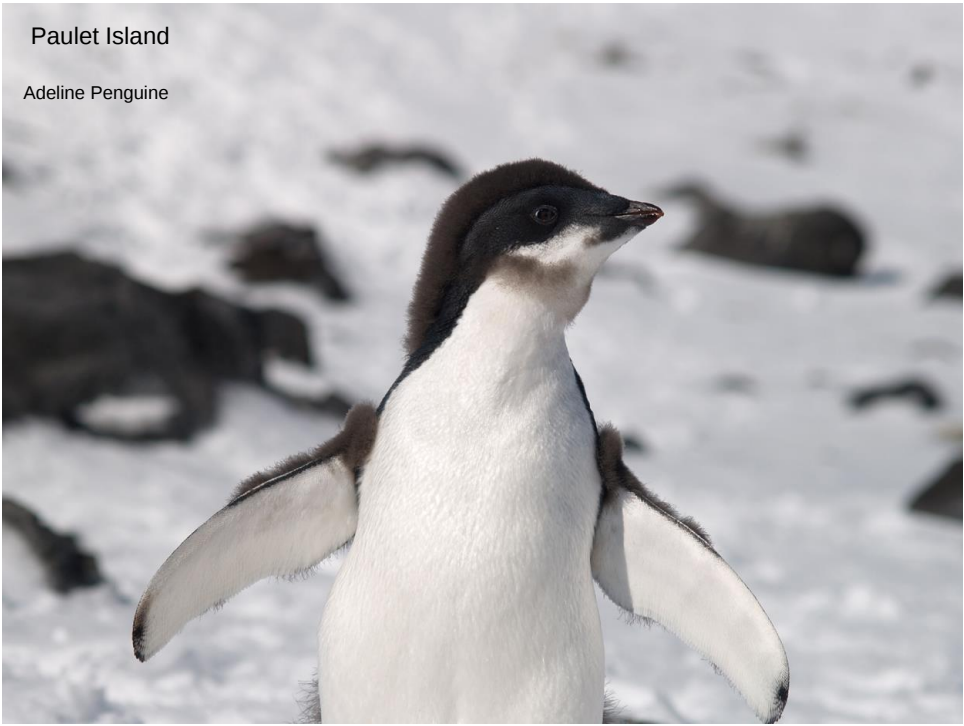
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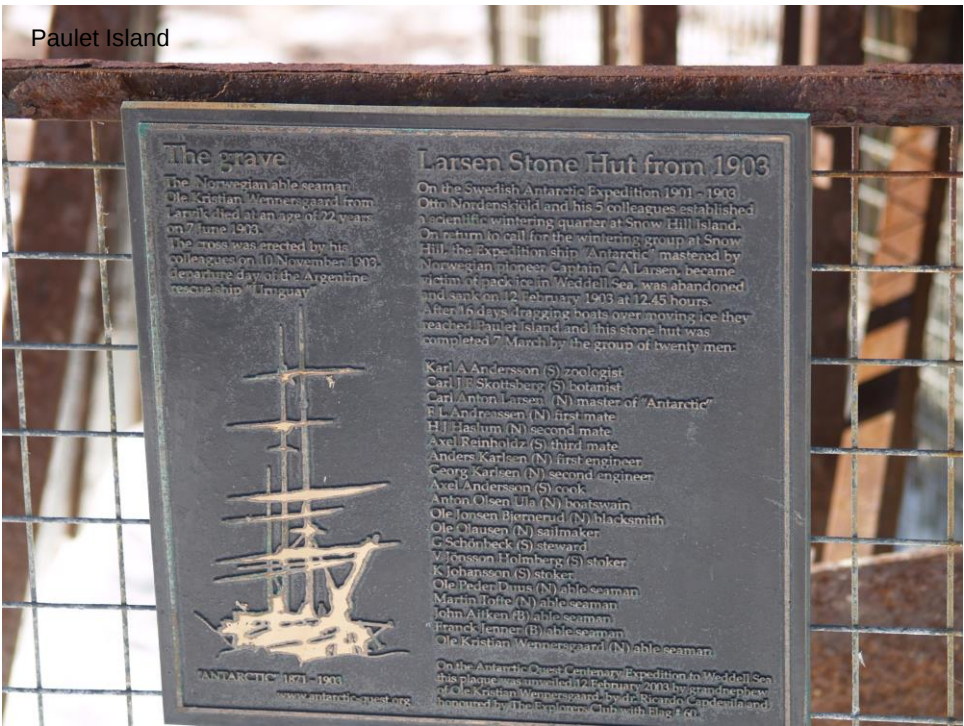
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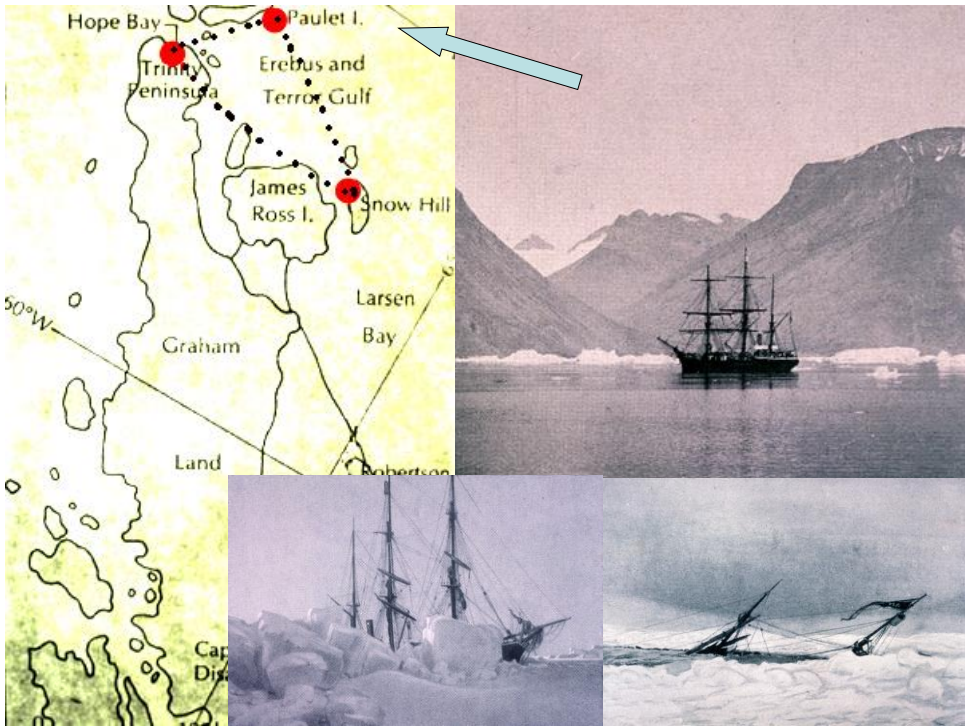
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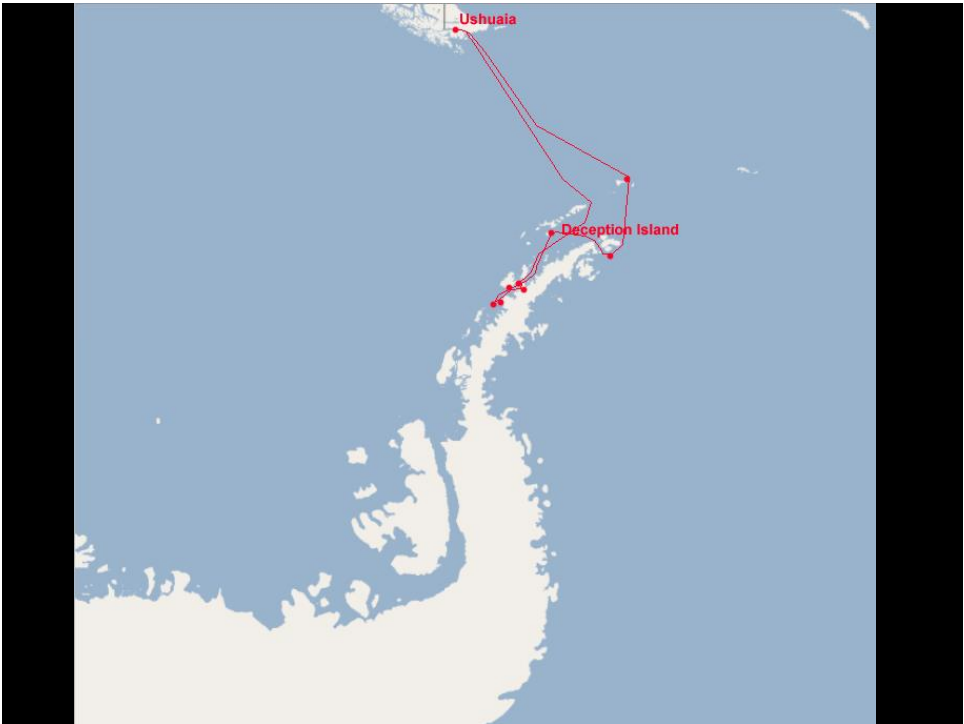
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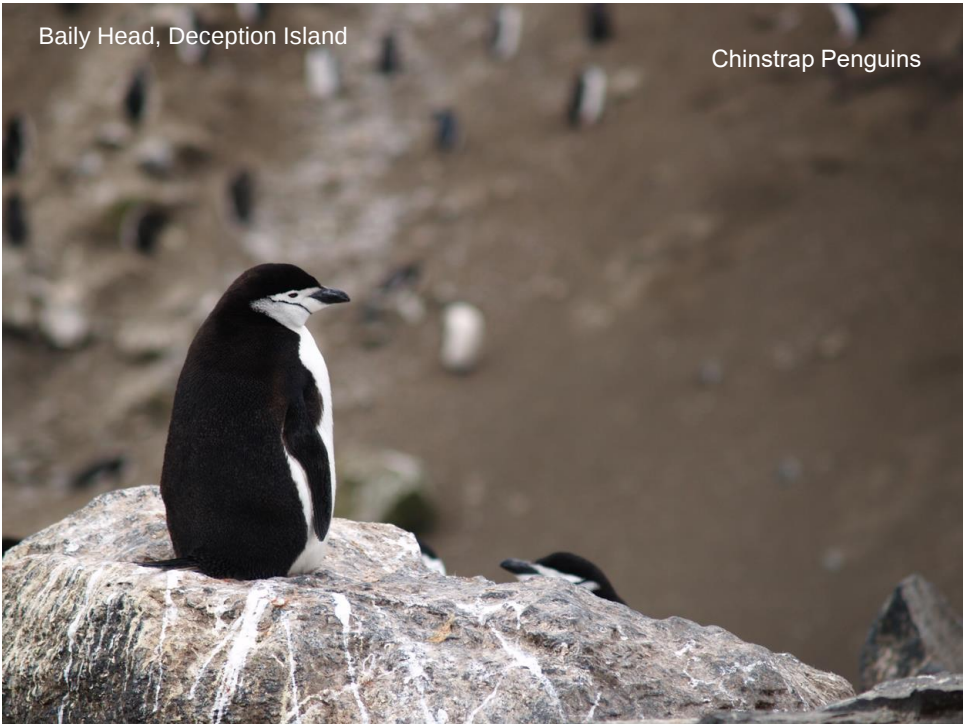
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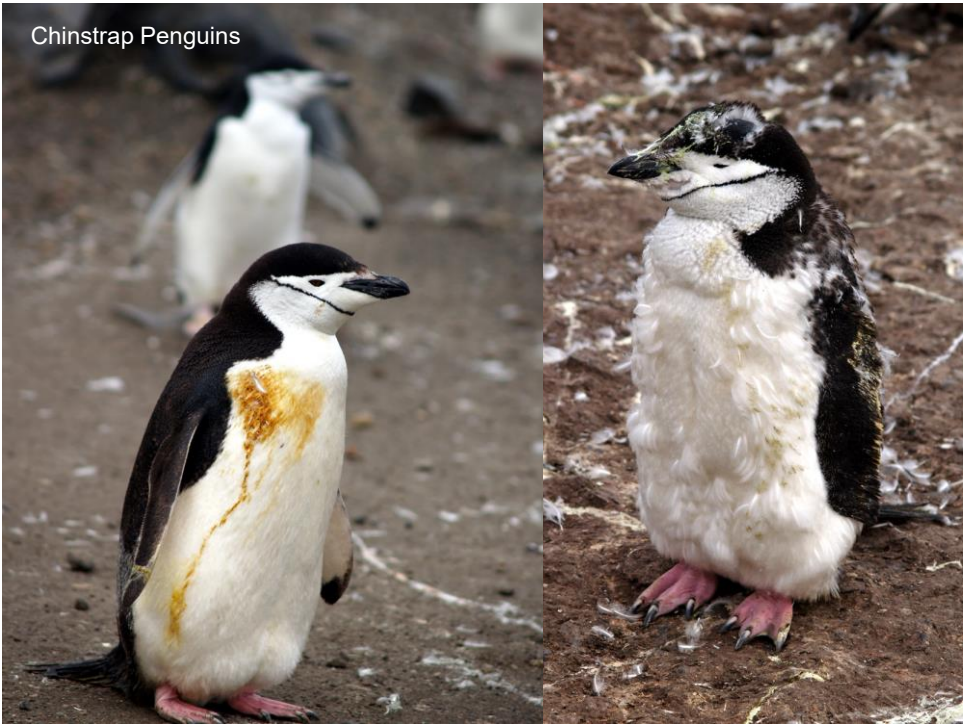
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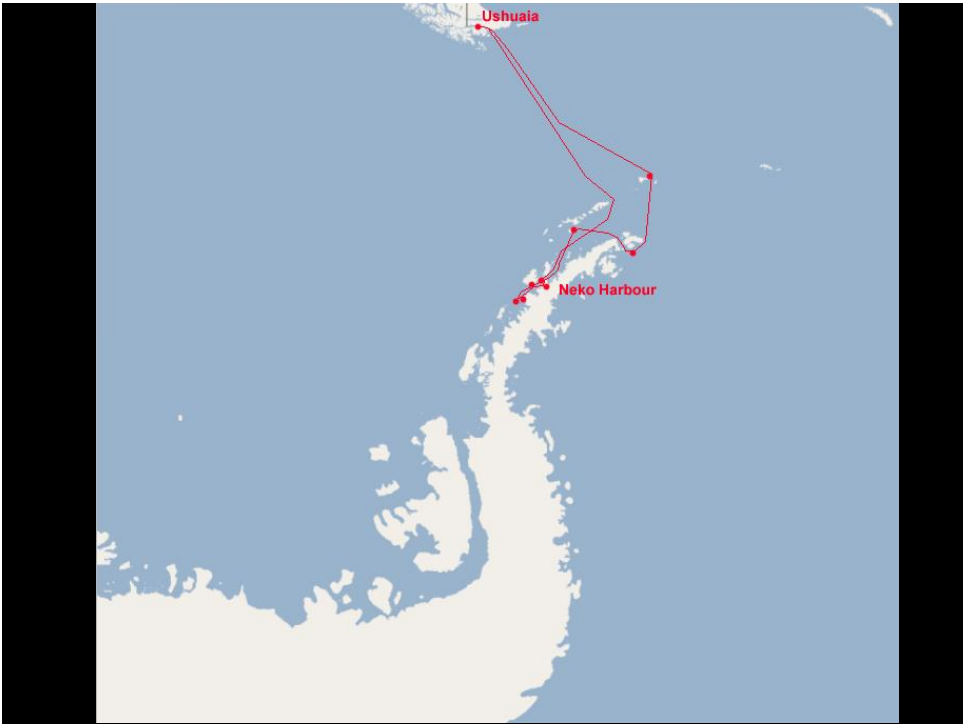
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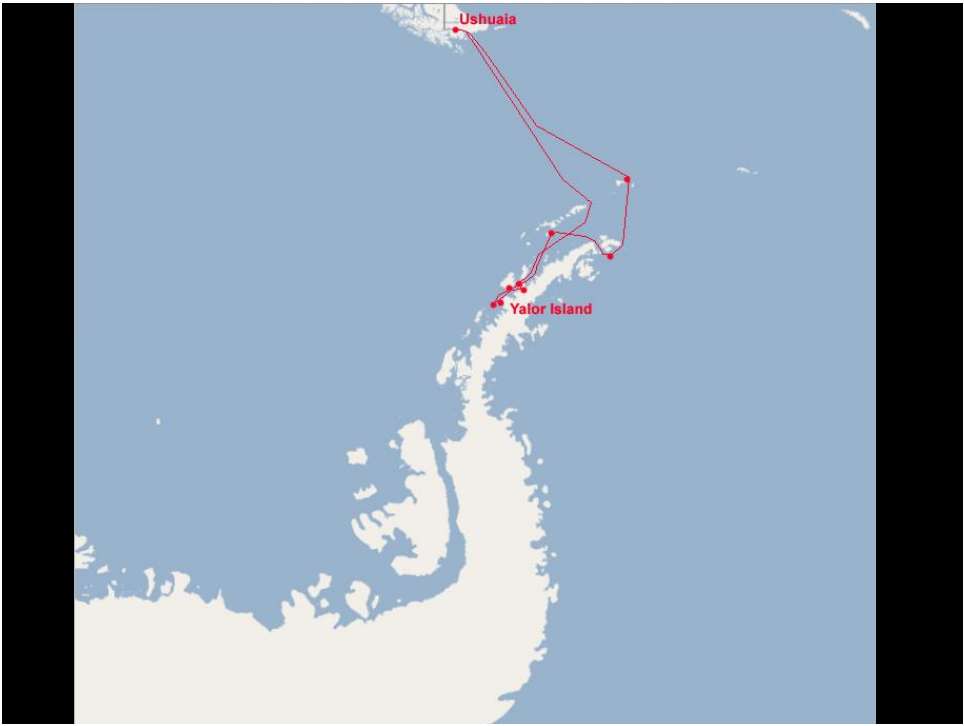
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**FORSKNINGSPROJEKT:**

- 1) Hur påverkas besökaren av polarupplevelsen?
- 2) Hur upplevelse gästen sin påverkan?
- 3) Blir man ambassadör?



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**FORSKNING: Pilotprojekt**

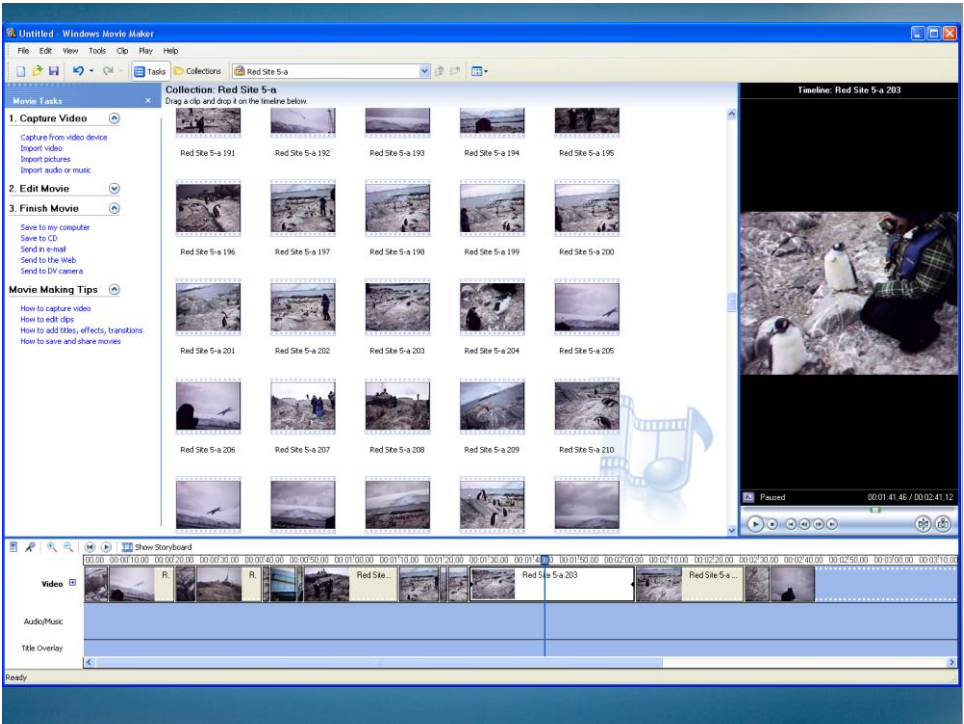
1) Action Cam studie:

Syfte: fånga aktiviteter, uppmärksamhet





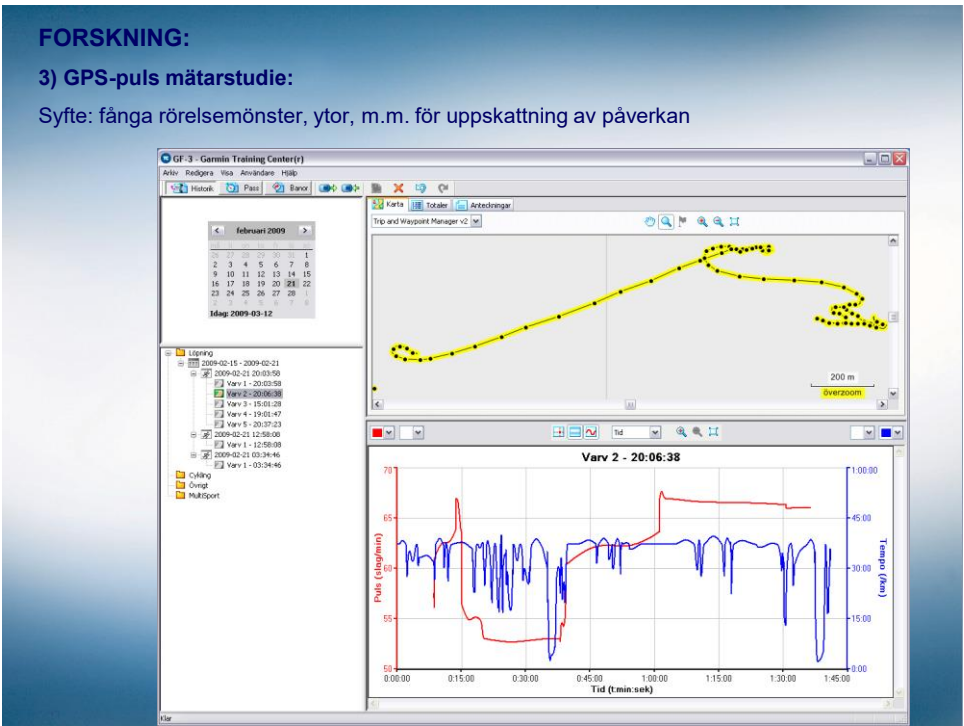
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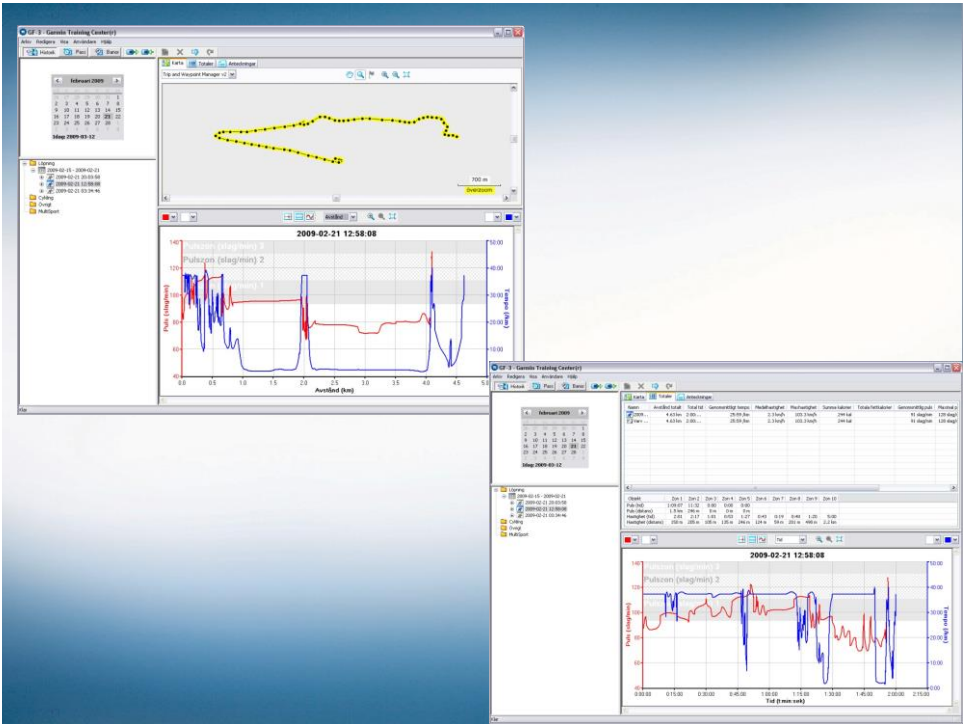
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Syfte: Hur påverkas gästen av nära kontakt med djurlivet?



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Evaluate \_\_\_\_\_ LAMCristina 2009 On-Site Survey \_\_\_\_\_

### 3. My experiences (Continued)

3.2 What was the best on this landing experience? List at least five great things about the landing

3.3 What was the worst with this landing experience? List at least five bad experiences

By experience  
 Score: 0=Terrible, beyond description 1=Terrible, 2=Very bad, 3=Bad, 4=OK, 5=Good, 6=Very good, 7=Very, very good, 8=Fantastic, 9=Incredible/ 10=Outstanding, beyond description

3.4 Of the landing was

|                              |   |   |   |   |   |   |   |   |   |   |    |                                 |
|------------------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------------------|
| Terrible, beyond description | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Outstanding, beyond description |
|------------------------------|---|---|---|---|---|---|---|---|---|---|----|---------------------------------|

3.5 of my satisfaction of the landing was

3.6 of my excitement during the landing was

3.7 of my interaction with peregrine was

3.8 of my interaction with seals was

3.9 of the point life was

3.10 of the natural scenery was

3.11 of the wildlife was

3.12 of my enjoyment during this landing was

3.13 of the guides was

3.14 of the logistics during the landing was

3.15 of my overall experience quality of this landing was

3.16 of my overall satisfaction with this landing experience was

3.17 My main emotion during this landing was on (choose one):

|                                             |                                      |
|---------------------------------------------|--------------------------------------|
| <input type="checkbox"/> Landscape          | <input type="checkbox"/> Calmness    |
| <input type="checkbox"/> Peregrine          | <input type="checkbox"/> Seals       |
| <input type="checkbox"/> Sea Birds          | <input type="checkbox"/> The guides  |
| <input type="checkbox"/> The other students | <input type="checkbox"/> My learning |
|                                             | <input type="checkbox"/> The weather |

3.18 What will be the most significant and meaningful outcome for you of this landing experience?

3.19 Value of the landing experience - How much was this experience worth for you?

|                |   |   |   |   |   |   |   |   |   |   |    |                       |
|----------------|---|---|---|---|---|---|---|---|---|---|----|-----------------------|
| Nothing at all | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Invaluable >10 000 \$ |
|----------------|---|---|---|---|---|---|---|---|---|---|----|-----------------------|

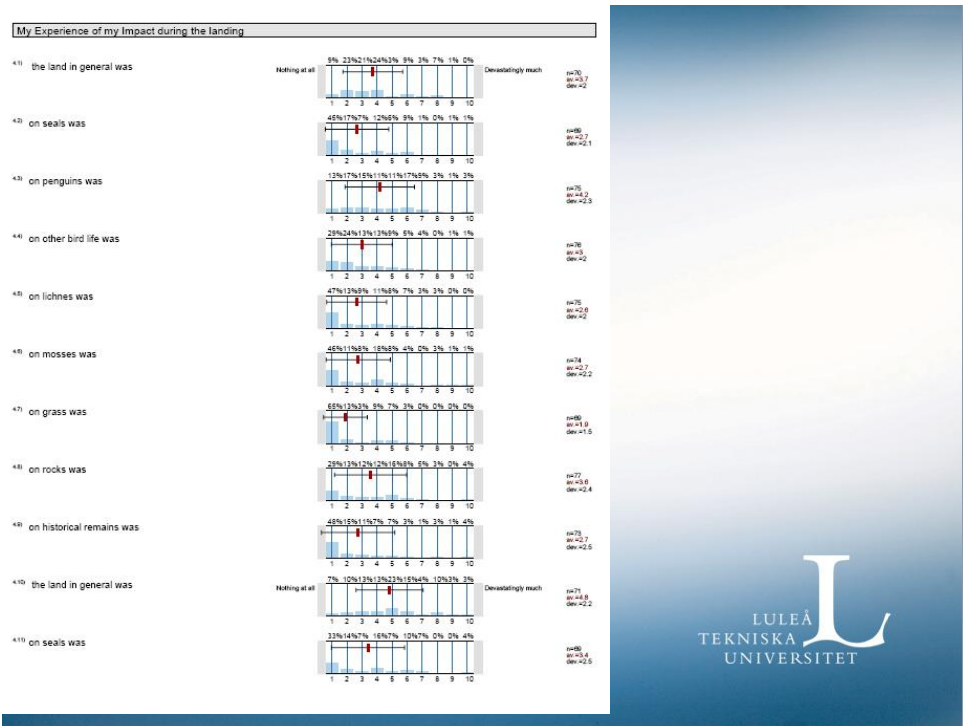
Score: 0=Nothing at all, 1=Very little, 2=Fairly little, 3=Fairly little, 4=Fairly little, 5=Fairly little, 6=Fairly little, 7=Fairly little, 8=Fairly little, 9=Fairly little, 10=Fairly little, 11=Fairly little, 12=Fairly little, 13=Fairly little, 14=Fairly little, 15=Fairly little, 16=Fairly little, 17=Fairly little, 18=Fairly little, 19=Fairly little, 20=Fairly little, 21=Fairly little, 22=Fairly little, 23=Fairly little, 24=Fairly little, 25=Fairly little, 26=Fairly little, 27=Fairly little, 28=Fairly little, 29=Fairly little, 30=Fairly little, 31=Fairly little, 32=Fairly little, 33=Fairly little, 34=Fairly little, 35=Fairly little, 36=Fairly little, 37=Fairly little, 38=Fairly little, 39=Fairly little, 40=Fairly little, 41=Fairly little, 42=Fairly little, 43=Fairly little, 44=Fairly little, 45=Fairly little, 46=Fairly little, 47=Fairly little, 48=Fairly little, 49=Fairly little, 50=Fairly little, 51=Fairly little, 52=Fairly little, 53=Fairly little, 54=Fairly little, 55=Fairly little, 56=Fairly little, 57=Fairly little, 58=Fairly little, 59=Fairly little, 60=Fairly little, 61=Fairly little, 62=Fairly little, 63=Fairly little, 64=Fairly little, 65=Fairly little, 66=Fairly little, 67=Fairly little, 68=Fairly little, 69=Fairly little, 70=Fairly little, 71=Fairly little, 72=Fairly little, 73=Fairly little, 74=Fairly little, 75=Fairly little, 76=Fairly little, 77=Fairly little, 78=Fairly little, 79=Fairly little, 80=Fairly little, 81=Fairly little, 82=Fairly little, 83=Fairly little, 84=Fairly little, 85=Fairly little, 86=Fairly little, 87=Fairly little, 88=Fairly little, 89=Fairly little, 90=Fairly little, 91=Fairly little, 92=Fairly little, 93=Fairly little, 94=Fairly little, 95=Fairly little, 96=Fairly little, 97=Fairly little, 98=Fairly little, 99=Fairly little, 100=Fairly little

3.20 How helpful did you experience during this landing?

PSC1200 Page 24



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**Preliminära resultat:**

- 1) Antarktis stark upplevelse, men gruppstorlek påverkar upplevelsen negativt
- 2) Upplever en begränsad egen påverkan på miljö och djurliv, men större påverkan från gruppen
- 3) Nära djurinteraktion var oväntat men gav djup påverkan (transformering)

A person wearing a blue jacket, yellow pants, and a black hat is sitting on the ground, feeding a penguin. The penguin is black and white, and the person is holding a small white object in their hand.

A large group of people, some wearing backpacks and hats, are walking through a vast, flat, sandy landscape. In the background, there are many penguins standing on the ground. The landscape is flat and sandy, with some low hills in the distance.

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Mottot för Student-On-Ice!

Protect the Poles - Protect the Planet



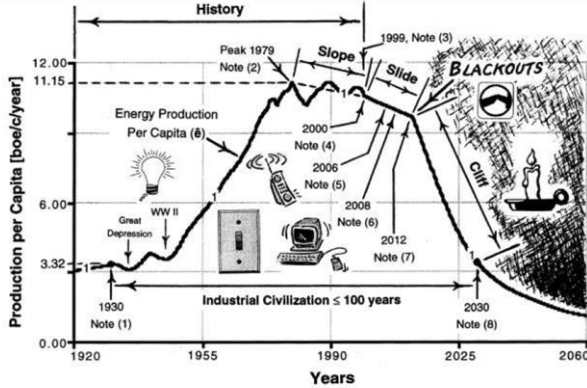
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Generation G

Generation Green, Global, Generous, Gentle, etc.,

The Olduvai Theory: 1930-2030





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LTU erbjuder 2011 en kurs Polar Turism och Destinationer 7,5 hp!  
2 Upplevelsestudenter – som gör research under expeditionen.



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SOI Polar Tourism Team 2009

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