Tourism: A Growing Presence in an Ice Diminishing Arctic

Dr. John Snyder
Strategic Studies, Inc.
Centennial, Colorado
The Significance of Arctic Tourism

• Tourism is the single largest human presence in the Arctic.

• The vast majority of Arctic tourists travel aboard marine transport.

• The number of Arctic tourists far exceeds the populations and infrastructure capacities of their host communities.

• Arctic economies rely on tourism for revenue, jobs, personal income, and public finance. It’s future is thus assured.
Two Centuries of Arctic Tourism

Early 1800’s tourist destination for:
Mountaineers
Anglers
Hunters
“Knapsack” Adventurers

1850’s Mass tourism enabled by:
Steamships
Railroads
Increased personal wealth
More leisure time
Arctic Tourism Today: 5 Diverse Markets

1. Mass Tourism
2. Sport Fishing and Hunting
3. Nature Tourism
4. Adventure Tourism
5. Cultural and Heritage Tourism
Tourism Growth Caused by Reduced “Barriers to Entry”

**Physical Access Improved**
- Reduced amount, extent and duration of Arctic sea ice
- Weather conditions becoming more tolerable
- Improved transport technologies
- New and expanding infrastructure
- New recreational clothing and equipment

**Time to Travel**
- More leisure time
- Fast and convenient access to Arctic gateway communities
- Large population now entering retirement

**Cost of Travel Reduced**
- Travel increasingly affordable
- More personal wealth to facilitate travel

**Jurisdictional Constraints**
- Allowable entry replacing prohibited access
- Closure of military bases and reduced security restrictions
Less Ice = New Destinations & Expanded Seasons

- North Pole
- Northwest Passage
- Northern Sea Route
- Wildlife Habitats
- Heritage Sites
Allowable Entry Replaces Prohibited Access

New tourism opportunities:
- Reduced Military Restrictions
- Economic Development by former Soviet Union and Native Governments

Vast Arctic regions now open:
- Russia
- Greenland
- Nunavut
Economic Significance of Arctic Marine Tourism

- **Tourism is a primary economic development goal for all Arctic economies.**
  - **Norway:** 370,000 cruise passengers visited Norway in 2007, double the number that arrived in 2000. In 2007, Svalbard had 45 cruise calls, 17 more than in 2006.
  - **Iceland:** tourism is nation’s second largest industry with annual growth of 9% since 1990. Since 2000 tourists have outnumbered Icelanders.
  - **Canada:** Cruise ships doubled in 2006, from 11 to 22. Inuit-owned Cruise North Expeditions entered market in 2008 with trips to Ellesmere Island.
  - **Russia:** Northern Sea Route, White and Barents Seas now have cruise tourism. Kamchatka and Kola Peninsulas offer sportfishing and wildlife tours.
  - **Alaska:** 2007 cruise visitor volume was 1,029,800. This is an increase of 7.3 percent to between 2006 and 2007.
THE RAPID GROWTH OF ARCTIC MARINE TOURISM
GREENLAND CRUISE TOURISM: 2003 TO 2008

Number of Cruise Ship Arrivals
2003 = 164
2008 = 375

Number of Cruise Ships
2003 = 13
2008 = 39

Total Cruise Tourists in 2008 = 24,999
(Crew and staff add to this total)

Greenland’s Population = 56,901

Sources: Greenland Port Statistics; Greenland Tourism & Business Council
Human Impacts of Arctic Tourism

Social Issues
- Communities seasonally transformed
- Infrastructure capacities exceeded
- Emergency response and law enforcement resources strained.
- Social institutions overwhelmed

Cultural Issues
- Native People attempt to balance economic benefits with cultural preservation and subsistence practices.

Tourist Perceptions
- No terror threats in the Arctic
- Climate change publicity is priceless
- Response to scarcity - see the Arctic and its wildlife before it is “lost”
Potential Environmental Impacts

• Oil spill and illegal discharge

• Disturbance of marine mammals and damage to fisheries

• Invasive species from ballast and shore excursions

• Wildlife disruptions during breeding and migratory seasons

• Solid waste disposal

• Air pollution by toxins and particulates

• Noise pollution

• Protected Areas require special use guidelines
Polar Tourism Marine Incidents

2007 Explorer sinks during Antarctic polar tourism cruise.
## Marine Incidents Involving Polar Cruise Ships

<table>
<thead>
<tr>
<th>MARINE INCIDENT</th>
<th>TOTAL EVENTS</th>
<th>EVENTS SINCE 2000</th>
<th>PERCENT SINCE 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polar Cruise Ships Sunk, 1979 – 2007</td>
<td>8</td>
<td>5</td>
<td>63 %</td>
</tr>
<tr>
<td>Polar Cruise Ships Running Aground, 1972 – 2009</td>
<td>27</td>
<td>16</td>
<td>59 %</td>
</tr>
<tr>
<td>Pollution and Environmental Violations, 1992 – 2009</td>
<td>64</td>
<td>42</td>
<td>65 %</td>
</tr>
<tr>
<td>Disabling by Collisions, Fires, Propulsion Loss, 1979 - 2009</td>
<td>34</td>
<td>28</td>
<td>82 %</td>
</tr>
</tbody>
</table>

SOURCES: Public Media Sources, Ross A. Klein, Ph.D., and [www.cruisejunkie.com](http://www.cruisejunkie.com)
Other Marine Transport and Lives at Risk

- Ferries
- Charter touring vessels
- Kayaks
- Sport fishing boats
- Private vessels
- Crew
- Staff
### Cruise Ship Illness Outbreaks: 2002 - 2007

<table>
<thead>
<tr>
<th>Year</th>
<th># of Reports</th>
<th>Total Sick</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>43</td>
<td>3530</td>
</tr>
<tr>
<td>2003</td>
<td>44</td>
<td>3556</td>
</tr>
<tr>
<td>2004</td>
<td>42</td>
<td>3675</td>
</tr>
<tr>
<td>2005</td>
<td>35</td>
<td>4674</td>
</tr>
<tr>
<td>2006</td>
<td>54</td>
<td>6815</td>
</tr>
<tr>
<td>2007</td>
<td>33 (7 Polar Cruises)</td>
<td>4166</td>
</tr>
</tbody>
</table>

SOURCE: United States Center for Disease Control (CDC).
Exposure of tourists to environmental contaminants is a health issue receiving little attention. Examples include:

- **Cold War Legacy**: Former military facilities and caches with hazardous building materials and toxic substances are serious health threats.

- **Historic Structures**: Abandoned canneries, whaling and sealing stations, and explorers’ huts are simultaneously tourist attractions and health threats.

- **Soviet Union’s Environmental Pollution**: Dangerous environmental contaminants remain throughout the Arctic’s largest land mass.
The Probable Future of Arctic Marine Tourism:

- Growing number of Arctic tourist destinations
- Length of seasons expanding
- Duration of the tourist visit increasing
- Greater diversity of vessels in polar waters
- Transits less conventional and predictable
- Cumulative impacts are
  - larger numbers of tourists
  - spending more time
  - in more locations
- Accomplished by Prevention and Preparedness
  - Actions that Prevent Harm
  - Improve Incident Response Capabilities
ACTIONS TO PREVENT HARM

• **Information for Safe Passage:**
  - Ice Condition Information: Expand Coverage
  - Weather Information: Expand Coverage and Timely Notifications
  - Update Hydrographic Charts
  - Navigational Aids
  - LRIT Long Range Identification and Tracking
  - Coordinate Cruise Ship Transits & Scheduling for Mutual Aid
  - Collaboration of International Information Organizations (e.g., Maritime, Hydrographic, Meteorological, and Maritime Satellite Organizations)

• **Guidelines for Vessel Operations**
  - IMO Guidelines for ships operating in Arctic ice covered waters
  - Improve Passenger Ship Safety in Arctic Waters
  - Multilateral Arctic Search and Rescue (SAR) Instrument
  - Unified Governance: UN Convention on Law of the Sea
ACTIONS TO IMPROVE INCIDENT RESPONSE CAPABILITIES

• **Expand Infrastructure Capacity**
  - Places of Refuge
  - Expand and Develop Ports
  - Search and Rescue Resource Investments
  - Medical Evacuation & Care Resources
  - Shoreside Evacuation Shelters and Provisions
  - Environmental Incidence Response Equipment and Personnel
  - Salvage Resources
  - Waste Disposal Facilities
  - Law Enforcement Resources

• **Human Resource Training**
  - Mariners
  - Ice Navigators
  - Emergency Service Providers
  - Lifeboat Drills and Prepare Tourists for Extreme Conditions
  - Environmental Managers and Monitors