Caspian seal conservation progress report

Caspian Environment Programme
Steering Committee meeting
Almaty, September 14 2010
The Caspian seal, *Phoca caspica*, is an iconic, flagship species for the Caspian Sea.
The species population size has dropped dramatically over the past 150 years.
Only pups killed from 1960s

This has been mainly due to unsustainable commercial hunting
The decline continues today

IUCN: from 'Vulnerable to 'Endangered'
October 2008

This decline is continuing NOW, mainly due to:

- hunting
- Incidental take in fisheries

CAB quotas of 18,000

Estimated >10,000 in illegal sturgeon fishery in north Caspian
Seals are caught mostly in sturgeon nets of 100–125mm mesh

Photo: Agip KCO
up to $100 per skin

Oil – $14 per litre in market

Blubber used for bait
Other anthropogenic threats include:

- Collapse in fish stocks due to overfishing, river damming and *Mnemiopsis* invasion.

  *This should be being addressed by the fisheries component of Caspeco*

- Habitat loss and incidental mortality due to local poaching and disturbance as well as industrial & recreational developments.

  *This should be being addressed by the SSPA network component of Caspeco*
Habitat loss due to disturbance & poaching at haul-out sites....
Coastal developments affecting critical habitat

Recreational development plan for Kenderli
O&G development near Critical moulting habitat In Komsomolets Bay
Disturbance of ice-breeding habitat by industrial shipping
CSCAP consists of 6 parts:

- Institutional arrangement;
- Scientific background (research and monitoring)
- Reduction of taking (legal, illegal, and by catch)
- Conservation of seals and their habitats
- Public information
- Financial implications
## Scientific background (research and monitoring)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>To carry out a full annual survey on the entire winter ice-field of pups and adult seals</td>
<td>CISS annual survey</td>
</tr>
<tr>
<td>To carry out counts at seal haul-out sites in non-iced areas of the Caspian, simultaneously with the annual February survey and at other seasons</td>
<td>Darwin 2006–09; CISS</td>
</tr>
<tr>
<td>To describe, investigate and analyze all causes of mortality</td>
<td>Ecotox, CISS &amp; Darwin</td>
</tr>
<tr>
<td>To investigate Caspian seal migration patterns, ice-breeding habitat selection and foraging locations using telemetry systems</td>
<td>CISS</td>
</tr>
<tr>
<td>To investigate Caspian seal genetic diversity</td>
<td>CISS &amp; Darwin</td>
</tr>
</tbody>
</table>
Reduction of taking of (legal, illegal, and by-catch)

<table>
<thead>
<tr>
<th>RSC should prepare recommendations for Commission for Aquatic Bioresources of the Caspian Sea for all kinds of seal taking (commercial and scientific).</th>
<th>✓ CISS &amp; CEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSC to develop modern, non-lethal research methodologies for the Caspian basin</td>
<td>✓ CISS &amp; Darwin</td>
</tr>
</tbody>
</table>
## Legal hunting of Caspian seals 2004-

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pup production</td>
<td>-</td>
<td>21,063</td>
<td>16,918</td>
<td>5,667</td>
<td>6,838</td>
<td>11,754</td>
</tr>
<tr>
<td>Quota*</td>
<td>18,000?</td>
<td>18,000?</td>
<td>18,000</td>
<td>18,000</td>
<td>18,000</td>
<td>20,000 (8,080 RF)</td>
</tr>
<tr>
<td>Hunt*</td>
<td>4,614</td>
<td>??</td>
<td>3,746</td>
<td>90</td>
<td>??</td>
<td>??</td>
</tr>
</tbody>
</table>

* Figures from Caspian Bioresources Commission (CAB)

Legal hunting quotas exceed annual pup production in most years. Even low levels of hunting, and other sources of mortality such as fishing by-catch will continue to drive the population in steep decline.

*For Caspeco to be effective, it is essential that CAB decisions and the basis for them should become transparent and accessible.*
### Conservation of seals and their habitats

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
<th>Progress so far</th>
</tr>
</thead>
<tbody>
<tr>
<td>To take appropriate measures for the protection of key habitats and for ensuring the preservation of areas which are essential to the maintenance of the vital biological functions of seals.</td>
<td>Protected area project ‘Caspeco’</td>
<td>no documented progress so far</td>
</tr>
<tr>
<td>To preserve habitats and seals, within and outside protected areas, from undue disturbance or changes resulting, directly or indirectly, from human activities.</td>
<td>Protected area project ‘Caspeco’</td>
<td>no documented progress so far</td>
</tr>
<tr>
<td>To identify areas of degraded seal habitat and explore possibilities for restoring such habitat or creating new habitat to compensate for losses.</td>
<td>Some areas identified (CISS &amp; Darwin; Caspeco concept paper)</td>
<td>Restoring/creating habitat (Caspeco)</td>
</tr>
<tr>
<td>Prevention of illegal hunting</td>
<td></td>
<td>no documented progress so far</td>
</tr>
<tr>
<td>To reduce disturbance by ice-breakers and other shipping</td>
<td></td>
<td>Mitigation measures proposed (CISS and Agip KCO)</td>
</tr>
</tbody>
</table>
Caspeco plan for Special Protected Areas for seals (SSPAs)  

Astana, March 2010
breeding
moulting
Foraging at sea
Resting on shore
In summary:

The international scientists (CISS, CEP), companies and funding bodies (Agip KCO, UK Darwin Initiative, World Bank, GEF) have been and continue to support and promote Caspian seal conservation.

The international CISS and Darwin teams continue to act as the RSC

BUT

Very little progress seems to have been made so far on participation in conservation effort by regional authorities
IMMEDIATE STEPS for the REGION
Which MUST be taken to
Save the Caspian seal

• Develop communication lines between CAB, RSC and Caspeco
• Adopt a regional zero legal hunting quota for the foreseeable future
• Close the sealskin factories in Dagestan
• Prohibit trade in seal products in local markets
• Prevent illegal sturgeon fishing
• Make large-mesh (<100mm) monofilament nets unavailable throughout region
• Develop alternative sustainable livelihoods in fishing communities
• Restore Caspian fish stocks by regulating take and creating no-take zones
• Develop and implement Seal Protected Areas during life of Caspeco project
Is this the only future for Caspian seal pups?
Nothing will change without REGIONAL AUTHORITY ACTION
We are indebted to all our colleagues in the Caspian Environment Programme, Caspian International Seal Survey (CISS) team, Agip KCO and all our partner Institutes in the Darwin Initiative Project.

Funding for different aspects of this study by Agip KCO, Darwin Initiative project ‘Identification and elimination of threats to the Caspian seal’ and the Caspian Environment Programme. The Caspian seal project is managed and coordinated through the University of Leeds.