What is Cows and Fish?

We are about:

• being a catalyst
• technical assistance
• another approach to resolve landscape issues
• maintaining and restoring biodiversity
• people, partnerships, and communities
• a process
What is Cows and Fish?

We are about:

• ecological literacy
• sustainable grazing and other management
• landscapes and watersheds

• building stewardship:
  literacy → attitude shift → action
Cows and Fish Process Elements

Mission

Awareness

Team Building

Monitoring

Tool Building

Community Based Action
Cows and Fish Process Elements

Awareness

Mission
• 415 presentations, workshops and field days

• Over 11,500 people

Evaluation results:

• 83% of producers learned new information as a direct result of their interaction with Cows and Fish
Cows and Fish Process Elements

Awareness → Mission → Team Building
• Neighbours talking to neighbours
• Sharing information, knowledge and perspective
Cows and Fish
Alberta Riparian Habitat Management Society
Cows and Fish Process Elements

Awareness → Mission → Team Building → Tool Building
Cows and Fish Process

Tool Building

• Provide riparian management tools and alternatives to landowners

• Deliver riparian, range and pasture health assessment tools: 110 hands-on field days up to 2004

• Develop new demonstration sites
“Train the Trainer” Workshops:

In Alberta:

• 3-5 each year

Many topics, including:

• Riparian Ecology, Riparian Health
• Riparian Restoration Principles
• Economics of Riparian Management
• Grazing Principles and Case Studies
• How to work with communities
• Riparian Plant Identification

Presentation Skills Workshops

5 (2002-05)

How to develop and deliver effective presentations
Tool Building

Elements

Why?

• Increase skill set
• Increase consistency
• Increase landowners’ local opportunities
Tool Building

Outcomes

• Decrease psychological barriers
• Increase ideas and solutions
• Build on successes
• Increase motivation
Cows and Fish Process Elements

- Awareness
- Team Building
- Mission
- Tool Building
- Community Based Action
• Community and individual ownership
• Voluntary actions
• Watershed approach
• Commitment to follow through leads to:

Longevity!
Cows and Fish Process Elements

- Awareness
- Team Building
- Monitoring
- Tool Building
- Community Based Action
- Mission
Riparian Health:

1,370 riparian health inventories

- Identifies where issues exist
- Help direct action
- Provides a sense of progress
Elements

Independent Evaluations of Program, Process and Tools

Are we effective?

What characteristics are key?

Does the process work?
The Cows and Fish Program -

Delivering the Elements of Stewardship

It’s not what you do, it’s how you do it, and does it count?
Elements of Stewardship

1. Awareness

2. Ethic

3. Action
Staff Interaction Evaluation

• Answered 3 questions:
  – Do we achieve trust and credibility to enable messages to be accepted?
  – Does our message delivery enhance or increase awareness?
  – Is management change occurring as a result of using the Process and staff characteristics?
Respondents by Role

Knowledgeable About Riparian Management

% in Agreement

- Cmty Group n=93: 90%
- Other Landowner n=78: 79%
- Agency/Org n=22: 100%
82% of respondents learned new information or raised their awareness as a direct result of contact with Cows and Fish staff.
Learned New Information / Raised Awareness By Role

- Cmty Group n=93: 91%
- Other Landowner n=78: 72%
- Agency/Org n=22: 86%

82% of respondents learned new information.
Role

The Value of Community

The community-based approach used by Cows and Fish is a constructive forum to effectively work with landowners.
Respondents by Amount of Contact

Able to Motivate

Very Little
n=79-80
59%

Moderate
n=99-100
71%

Frequent/In-Depth n=22
95%

Amount of Contact

0% 25% 50% 75% 100%
Learned New Information / Raised Awareness By Amount of Contact

- Very Little n=79: 70%
- Moderate n=98: 89%
- Frequent/In-Depth n=22: 100%

Everyone with frequent/repeated contact learned new information
Amount of Contact
The Value of Constancy and Repetition

*It takes time* to build relationships in which barriers, and solutions, can be identified; contact with Cows and Fish is an important fixture in the process.
58% of respondents adopted new riparian management or changed management as a direct result of contact with Cows and Fish staff.
Adopted New/ Changed Management Practices

BY ROLE  n=193

- Yes  n=111
- No or N/A  n=82

Cmty Group  n=89 (46%)
- Yes 64
- No or N/A 36

Other Landowner  n=76 (40%)
- Yes 43
- No or N/A 57

Agency/Org  n=22 (11%)
- Yes 73
- No or N/A 27
Adopted New/ Changed Management Practices

BY AMOUNT OF CONTACT  n=193

Very Little  n=76 (40%)
Moderate  n=95 (49%)
Frequent / In-depth  n=22 (11%)

--58% adopted new or changed their riparian management
--64% of community group members made a change

Greater opportunity for interaction with staff was central to achieving increased rates of practice change.
88% of examples described ways people stood back, saw the bigger picture of riparian health, and then planned and applied the underlying principles of riparian management.

### Adopted New/ Changed Management Practices

#### TYPES OF PRACTICE CHANGE

<table>
<thead>
<tr>
<th>Practice Change</th>
<th>Percentage</th>
<th>Number (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjust season/ freq/#s/ winter/ general regime</td>
<td>29%</td>
<td>41</td>
</tr>
<tr>
<td>Fence-off water/ veg</td>
<td>25%</td>
<td>36</td>
</tr>
<tr>
<td>Use alternate water/pumps</td>
<td>20%</td>
<td>29</td>
</tr>
<tr>
<td>Fully exclude livestock</td>
<td>9%</td>
<td>14</td>
</tr>
<tr>
<td>Replant veg or create/expand buffers</td>
<td>5%</td>
<td>8</td>
</tr>
<tr>
<td>Modify crossing/ culvert</td>
<td>3%</td>
<td>4</td>
</tr>
<tr>
<td>Use riparian pasture</td>
<td>3%</td>
<td>4</td>
</tr>
<tr>
<td>Use demo/ training sites</td>
<td>2%</td>
<td>3</td>
</tr>
<tr>
<td>Limit/ eliminate chemicals</td>
<td>2%</td>
<td>2</td>
</tr>
<tr>
<td>Move salt/ minerals</td>
<td>1%</td>
<td>1</td>
</tr>
<tr>
<td>Allow beaver</td>
<td>1%</td>
<td>1</td>
</tr>
</tbody>
</table>

Total (n=143)
Staff provide a diverse array of mechanisms to successfully help with change.

95% indicated that the contribution staff provided was non-financial.

## HOW STAFF CONTRIBUTED TO PRACTICE CHANGE

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided with info/options, discussed plans/benefits/impacts</td>
<td>34%</td>
</tr>
<tr>
<td>Attended workshops/tours/field training</td>
<td>17%</td>
</tr>
<tr>
<td>Trained on RHA/results/received</td>
<td>12%</td>
</tr>
<tr>
<td>Was encouraged/motivated/reinforced/rec’d resources</td>
<td>12%</td>
</tr>
<tr>
<td>Brought people together as a process</td>
<td>6%</td>
</tr>
<tr>
<td>Saw/used photos</td>
<td>5%</td>
</tr>
<tr>
<td>Facilitated access to funds</td>
<td>5%</td>
</tr>
<tr>
<td>Demonstrated impacts of actions on water/vegetables</td>
<td>4%</td>
</tr>
<tr>
<td>Saw enthusiasm/expertise</td>
<td>4%</td>
</tr>
<tr>
<td>Rec’d literature/materials</td>
<td>1%</td>
</tr>
</tbody>
</table>

n=109
Staff Interaction Evaluation
Attributes for delivering stewardship

1. Use a proven process or pathway

2. Key characteristics are required

3. Frequent, varied contact is necessary
Staff Interaction Evaluation
Attributes for delivering stewardship

4. **Patience and persistence are key**; it takes 3-5 years for most people to make practice change.

5. **Confer ownership within a community**

6. **Monitor**

7. **Repeat**, as necessary, **everywhere**!
Cows and Fish encourages and helps communities, individuals, and resource managers to think and work on a landscape and watershed perspective.
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Cows and Fish Supporters and Members:
Alberta Beef Producers
Trout Unlimited Canada
Canadian Cattlemen’s Association
Alberta Sustainable Resource Development
Alberta Agriculture, Food and Rural Development
Alberta Environment
Fisheries and Oceans Canada
Prairie Farm Rehabilitation Administration-Agriculture and Agri-Food Canada
Alberta Conservation Association
Landowners and Community Groups
Funding Associates: AESA, Canada’s Greenhouse Gas Mitigation Program

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“The future isn’t what it used to be”
How do we do it?

Key Principles

Better riparian health starts with basic awareness and education messages.
How do we do it?

**Key Principles**

Landowner decisions and actions determine riparian health and the provision of ecological services.
How do we do it?

Key Principles

Management changes are practical, economical, restorative and sustainable.
How do we do it?

Key Principles

An effective pathway is needed.

That pathway is the Cows and Fish Process
How do we do it?

Key Principles

The appropriate scale to work at is the community, watershed level.