Getting Paid To Fish?

Using a tag-reward model to evaluate a stocked trout fishery
Wallowa Lake, OR

Kyle Bratcher, Josh McCormick, Jeff Yanke, Justin Herold
Oregon Trout

- ODFW stocks 7M trout yearly

- Evaluation objectives
  - Return-to-creel (RTC)
  - Harvest
  - Angler Effort

- Traditional creel methods
  - Expense
  - Long-term monitoring

- ODFW Trout Working Group (2013)
  - Focus on resident fisheries
  - Need for effective creel
North American Journal of Fisheries Management
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/ujfm20

A Reward-Recovery Study to Estimate Tagged-Fish Reporting Rates by Idaho Anglers

Kevin A. Meyer a, F. Steven Elle a, James A. Lamansky Jr. a, Elizabeth R. J. M. Mamer a & Arthur E. Butts a

a Idaho Department of Fish and Game, 1414 East Locust Lane, Nampa, Idaho, 83686, USA

Version of record first published: 18 Jul 2012
Oregon’s Tag Team

- Modeled after Tag-You’re-It (IDFG)
  - Ratio of reward to non-reward FLOY tags
  - $50 = 92% reporting rate

- Wallowa Lake in 2014
  - Henry Hagg Lake, and Lake of the Woods ongoing

- Cost
  - R&E Grant-$16,000
  - Assume all rewards funded

Be part of the ODFW Tag Team!

ODFW has released tagged fish in this waterbody to evaluate harvest, survival, growth, and migration – and we need your help!

If you catch a tagged fish:
- You may keep or release it.

If the tag says “Reward”
- You are eligible for a $50 reward!
- To claim your reward you must return the tag to the ODFW office listed below.
- Reward tags must be removed from released fish.

Please send ODFW the following information:
- Tag number(s)
- Where the fish was caught
- Date caught
- Species
- Length of fish

For questions, or to turn in a reward tag, contact:

OREGON DEPARTMENT OF FISH AND WILDLIFE
Wallowa Lake

- Nearly 40K stocked yearly
  - 38K Legal, 2K Trophy
  - Stocked 6 times from May-August
  - Distributed by stocking boat or at ramp

- Questions
  - What is current RTC?
  - What are harvest rates?
  - When are fish caught?
  - Where do fish go after release?
**Tagging**

- **FLOY Tags**
  - Visible, customizable, low cost

- **Tag allocation**
  - Numbers
  - Representative samples per release date, location, and size class

- **Methods**
  - In-hatchery day before release
  - Requires 3-4 people
  - 2-3 hours to tag 350-400 fish

- **Held in net pens within raceway overnight**
  - Low tag loss/mortality
Reporting

• Advertise
  o Press releases
  o Signs @ waterbodies
  o Advertising effort

• Let anglers collect the data!
  o ODFW office or marina
  o Phone, Online, Mail options

• Reward disbursements
  o Must have tag in hand to disperse reward
Results

• Legals
  o 1,740 – Non $ tags released
    • 446 returned (25.6%)
  o 76 – $50 tags released
    • 42 returned (55.3%)

• Trophies
  o 156 – Non $ tags released
    • 45 returned (28.8%)
  o 14 – $50 tags released
    • 8 returned (57.1%)

• $2,500 dispersed
  o 50 tags (56%)
Exploitation

- 19,127 fish caught of ~32,000 (61%)
  - 754 Trophies (62%)
  - 18,373 Legals (60%)
- 14,197 harvested (45%)
  - 598 Trophies (49%)
  - 13,600 Legals (45%)
- Harvest of caught fish 74.5%
- Median days between release and capture = 9

RTC goal of 60%
Return to Creel by Release Date

Release date (2014)

* Fish released before tags were available
**Movement**

- Where were fish caught after release?
  - Yellow = % of total release
  - Red = % of total returns

- Most fish caught outside zone of release
  - 58% of returns from zone 8
  - Conditions or Effort?
Challenges

- Not all reports come in complete
  - Follow-up

- Fish are being released without tags
  - May be hard to train anglers

- No estimate for effort
  - No catch rates
Benefits

• Provides cost/time effective creel
  o Return to creel
  o Harvest
  o Fishery Performance
  o Size-class performance
  o Movement

• Stocking Strategies
  o Timing
  o Stock performance
  o Location

• Get anglers involved in management
  o Increased contact/outreach
  o Good experiences

Be part of the ODFW Tag Team!

ODFW has released tagged fish in this waterbody to evaluate harvest, survival, growth, and migration – and we need your help!

Tag Number

If you catch a tagged fish:
• You may keep or release it.

If the tag says “Reward”:
• You are eligible for a $50 reward!
• To claim your reward you must return the tag to the ODFW office listed below.
• Reward tags must be removed from released fish.

Please send ODFW the following information:
• Tag number(s)
• Where the fish was caught
• Date caught
• Species
• Length of fish

For questions, or to turn in a reward tag, contact:

OREGON DEPARTMENT OF FISH AND WILDLIFE
Conclusions

• **Return-to-Creel**
  o ODFW objective of 60%

• **Harvest**
  o 45% harvest on all fish

• **Release timing**
  o Best returns early July
  o Move August stocking earlier?

• **Movements**
  o Stocking boat not needed to disperse fish
Questions?