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## **The Comeback Kid: *Castor canadensis*: Opportunities and Challenges to Reintegrating Beavers in Ada County and Owyhee County**

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## The Comeback Kid: *Castor canadensis*: Opportunities and Challenges to Reintegrating Beavers in Ada County and Owyhee County

### Abstract

In the last decade, scientific research, news stories, and documentaries have highlighted the value that nature's ecological engineers can bring to various ecosystems. After hunting and trapping led to the near extinction of beavers in Idaho, there has been an increasing popularity in using beavers (*Castor canadensis*) in habitat restoration projects. Beavers build dams that create complex habitats and increase biodiversity. Furthermore, research has shown that beaver dams dramatically alter streamside vegetation, increase groundwater elevations, increase stream productivity, and provide fish habitat. Due to the vast information available regarding the benefits of using beavers in restoration projects, this study aims to analyze the social challenges to the reintegration of beavers in Southwest Idaho.

In recent years, beaver-related projects have become more popular in semi-arid and arid regions in the Western United States. This study analyzes three successful beaver-related restoration projects in Idaho. Analyzing these case studies provides an opportunity to view the ways beavers have been used in restoring Idaho's lands. An integral part of understanding the challenges to the reintegration of beavers in Idaho through these restoration practices means understanding how they are perceived publicly. I provide a map that includes data on beaver observances and human-population data to better understand how the perception of beavers can be correlated to human populations in the Southwest region. The goal of this study is to identify social constraints stakeholders may have in reintroducing beavers to the and provide recommendations on how to capitalize on the benefits of using beavers in restoration projects in Idaho.



# THE COMEBACK KID: CASTOR CANADENSIS. Opportunities and Challenges to Reintegrating Beavers in Ada County and Owyhee County



PRESENTER:  
**Alicia Martin**

**BACKGROUND:** In recent years, beaver-related projects have become more popular among restoration and conservation groups in semi-arid and arid regions in the Western United States. Successfully managing beaver populations and resolving conflicts surrounding beaver-related restoration projects involves understanding current beaver population trends and analyzing their correlation to public attitudes. This study aims to identify social constraints landowners, ranchers, land managers, state, city, and federal governments, and other stakeholders involved in beaver management may encounter when using beavers as tools in restoration projects in Ada County and Owyhee County.

## METHODS

1. Owyhee County and Ada County, Idaho, United States were selected for this study due to being adjacent counties with differing population densities
2. Data from 2010 - 2020 was collected to provide the most relative information on beaver population trends
3. Statistical data on beavers trapped, relocated, or killed, and their pelt value was collected from Idaho Fish and Game's FY2010 - FY2019 Statewide Furbearer Reports
4. Beaver sightings were collected from Idaho Fish and Game and the Idaho Department of Environmental Quality
5. Literature review of scholarly and peer-reviewed journals regarding the use of beavers in restoration projects.
6. Searched for mentions of beaver in municipal websites to gather additional information of beaver management plans and public attitudes.

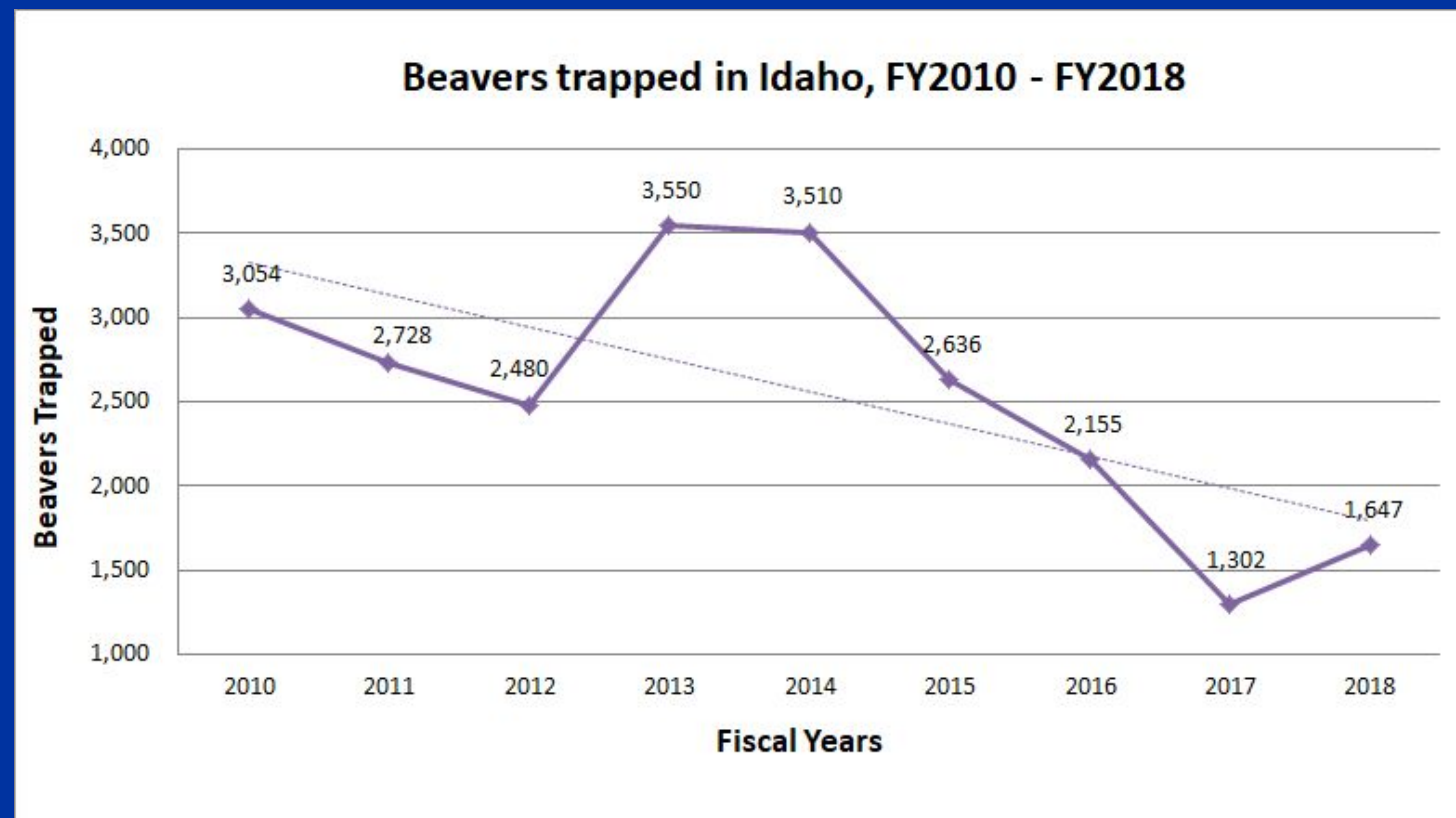
## RESULTS

- Beaver are among the top 5 most frequently harvested furbearers in Idaho.
- In the last decade, there has been a decrease in number of beavers being trapped .
- Beaver pelt value has been decreasing.
- 36.8% more beavers are harvested in Ada County versus Owyhee County.
- More depredation permits have been issued to Ada County versus Owyhee County to handle “problem” beaver.
- Negative perception of beaver in Ada County. Beaver viewed as “nuisance” or “pest.”
- Positive perception of beaver by landowners and ranchers in Owyhee County. Some express interest in integrating beaver in restoration projects on private land.

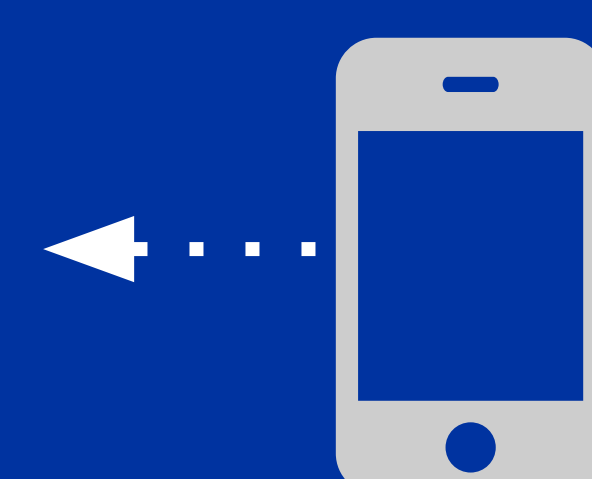
## CONCLUSIONS

Urban planning in Ada County should allow flexibility to accommodate an increased beaver presence. Collaboration between IDFG, Ada, and Owyhee County is needed to relocate beaver to areas that would benefit a site.

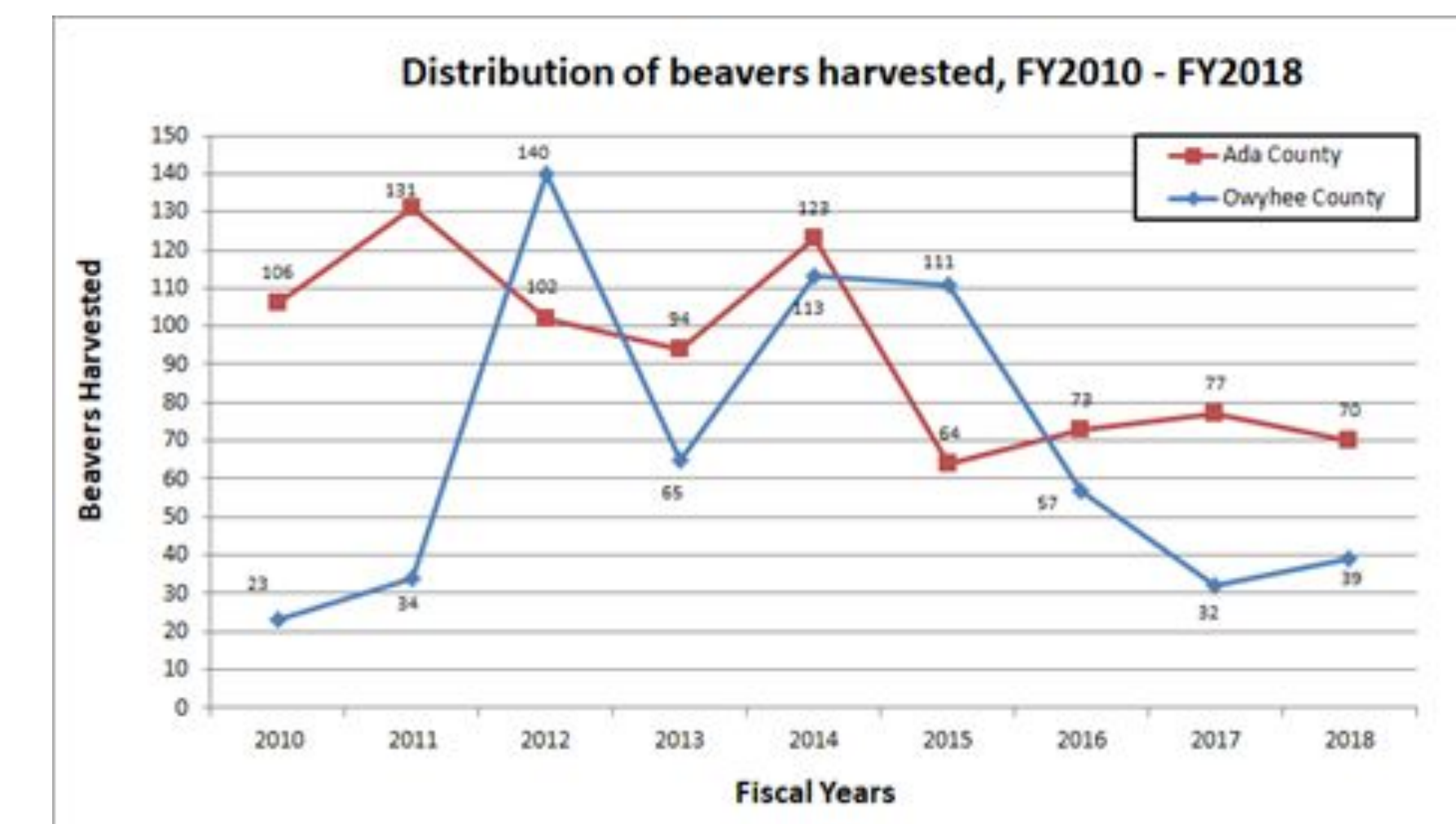
There is a decrease in beaver trapping and harvesting as well as higher amounts of depredation permits issued to Ada County compared to Owyhee County. A decrease in beaver trapping could lead to an increased presence of beaver in both counties.



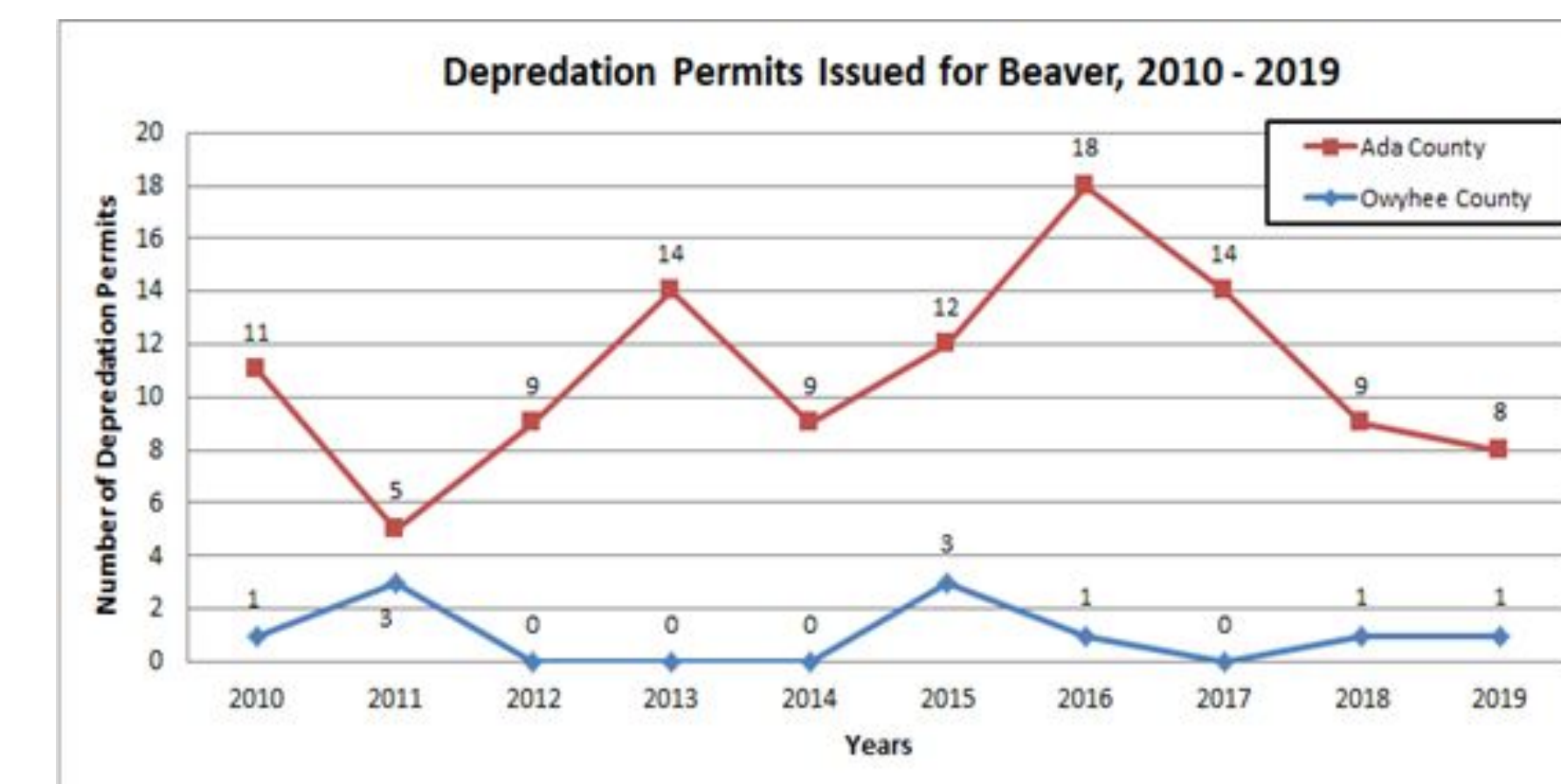
**NUMBER OF BEAVERS TRAPPED IN IDAHO BASED ON TRAPPERS WHO REPORTED THEY TRAPPED BETWEEN FY2009 – FY2018.** Fiscal years are from July 1st through June 30th. Source: Idaho Department of Fish and Game, FY2010 – FY2018 Statewide Furbearer Reports.



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Data collected from the IDFG Statewide Furbearer Reports reveals a decreasing trend in the number of beavers harvested Ada County in since 2010



Depredation Control Permits are issued by Idaho Fish and Game to allow individuals to kill or trap beaver or other furbearers to address damage complaints.

## ADDITIONAL DISCUSSION:

- Increases in beaver populations will greatly influence public attitudes, and subsequently, beaver management strategies, in two distinct ways in Ada County's urban landscape than they would in Owyhee County's rural landscape.
- **The use of beaver in restoration has the potential to promote ranching resilience to droughts by improving streamflow and increasing forage production.**
- The **interest and willingness to integrate beaver** that landowners and ranchers in **Owyhee County** have expressed **provides an opportunity for collaboration** between municipalities in Ada County experiencing problems with beaver colonization in urban areas.
- Future outreach should promote a culture of coexistence between humans and beavers in urban settings.

👤 Alicia E. Martin



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