

# An Overview of Columnaris: Diagnosis and Treatment

G. Derek Gibbs  
ODFW Fish Health Services

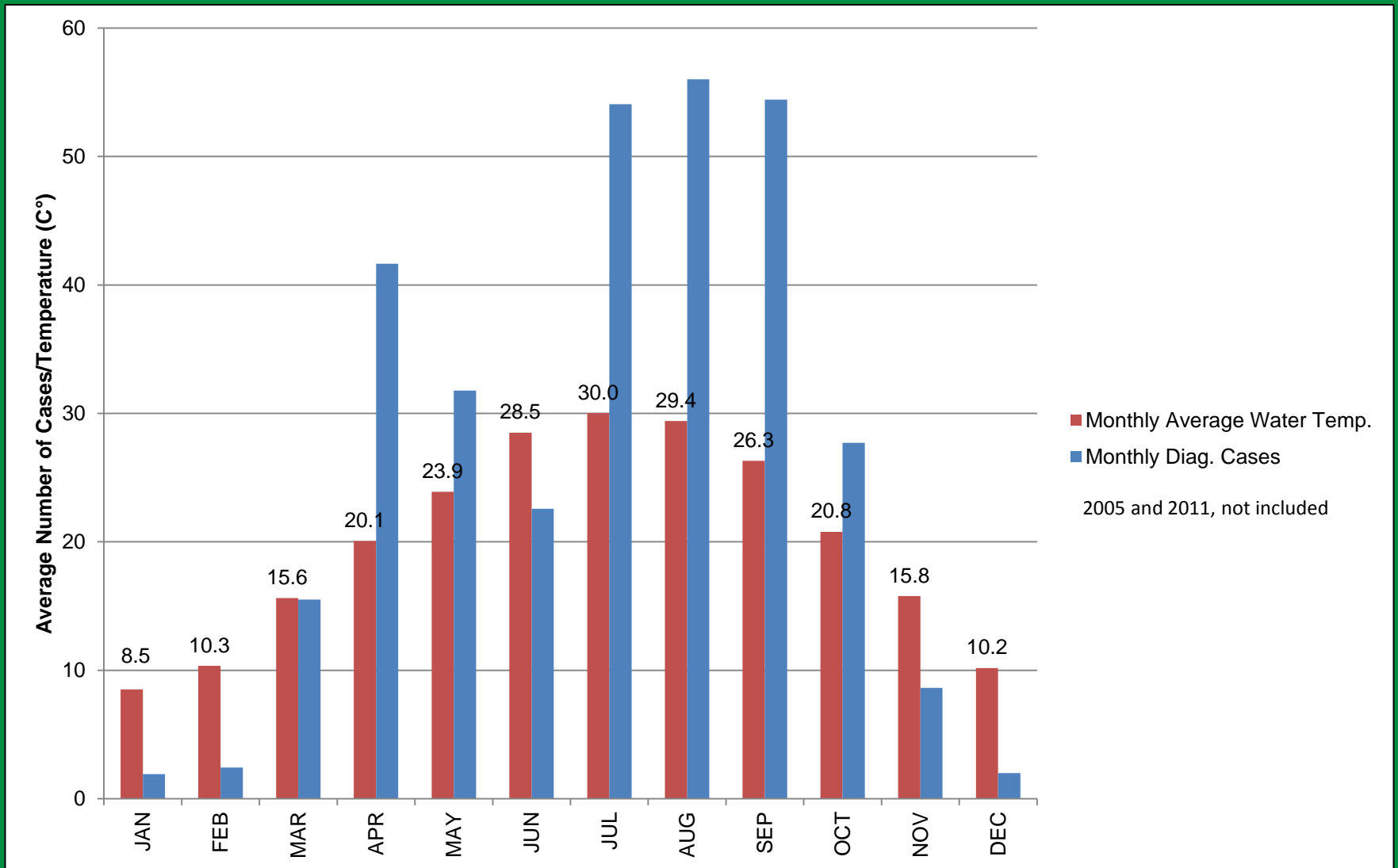








# Delta Diagnostic Cases 2001 - 2014



# General Information

- Columnaris is a bacterial infection of numerous fish species.
- Generally an opportunistic pathogen – associated with other infections and/or periods of stress for fish.
- Infections may be chronic or acute depending on the isolate.
- As water temperatures increase, an outbreak becomes more likely,  $> 20^{\circ}\text{C}$ .















Photographs courtesy of ODFW Fish Health Services

# Mixed infection with columnaris lesions



Photograph courtesy of ODFW Fish Health Services





Photograph courtesy of ODFW Fish Health Services



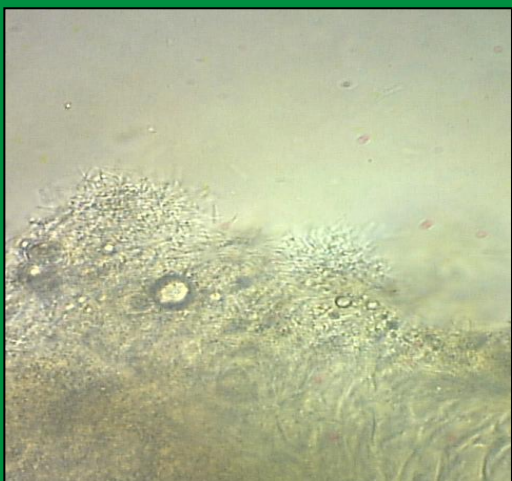
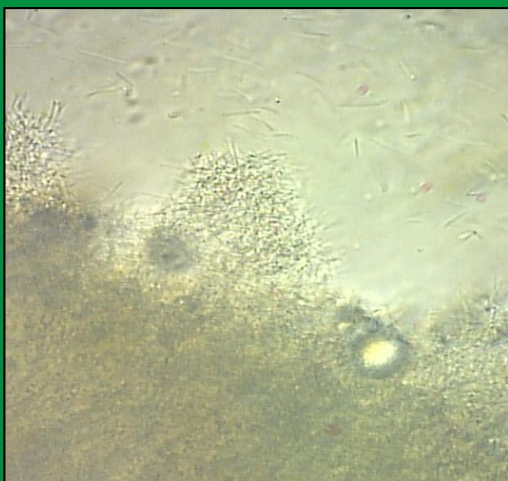


Photograph courtesy of ODFW Fish Health Services

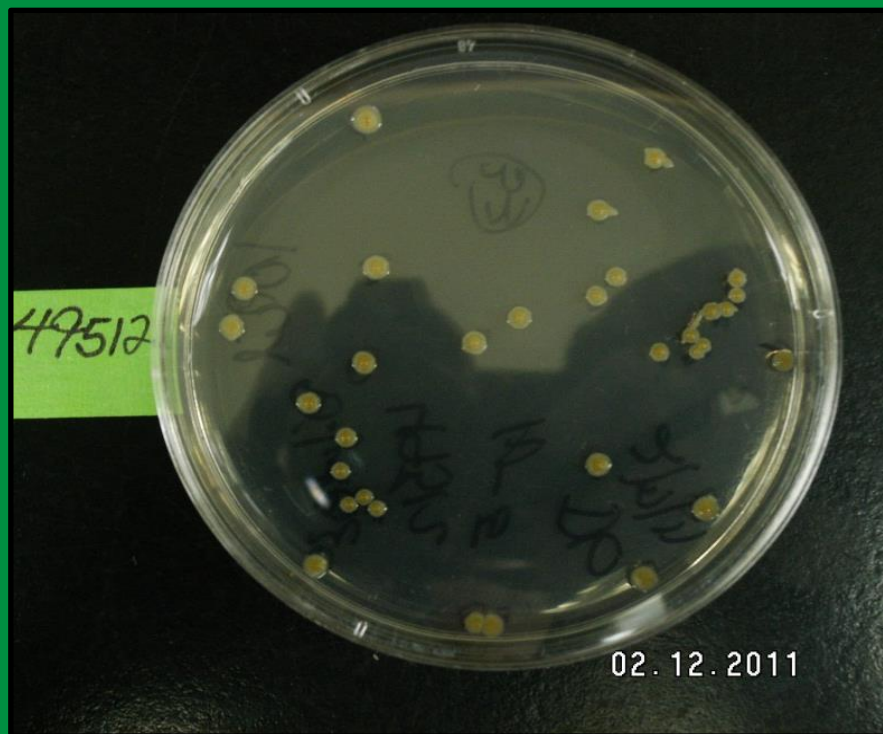


*Flavobacterium columnare*, causative agent of columnaris is a significant pathogen of many freshwater fish.









# Management Considerations

Stress:

Environmental

Mechanical



Stress



Immune Function (Health)





# Therapeutic Treatments

Terramycin<sup>®</sup> (Oxytetracycline)

INAD 10 grams/100lbs – 2 weeks

Labelled 3.75 grams/100lbs – 10 days

# Thanks

