Case Study Thoughts

Robert K. Smith DVM
Fatty Liver Syndrome
Fatty Liver Syndrome (Walleye)

Diet?
Bacterial Disease
Veterinary Feed Directive (VFD) for Aquaculture MINOR SPECIES

Owner Address:
Minnesota Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155
Phone: 651-288-2182
FAX: 651-288-2180

Animal Location:
See attached page for additional details.

Feed Distributor:
Smucker USA
712 East 2400 North
Topeka, KS 66604
Phone: 452-377-1500
FAX: 452-377-2921

**Terramycin®**
NADA 930.436; Approved by FDA

Phileo Animal Health
Glenpointe Drive East, 9th Floor
330 Fresh W. Burt Blvd.
Suite 2104
Teaneck, NJ 07666
Phone: 684-423-0274

**Drug Name:** Terramycin for Fish (Oxytetracycline)

**Dosage and Duration:**
- 3.75 to 7.50 g/day for 15 days, - 10 to 25 g/day for 5 days
- 3.75 g/day for 5 to 7 days

**Species:** Aquaculture

**Production Class:** Solvastream

**Group ID:** Pesticide

**Approx. Number to be Fed:**

**Expiration Date:** 02-15-2003

**Substitution Not Allowed:**

**Use of feed containing this Veterinary Feed Directive (VFD) drug in a manner other than as directed on the labeling (extra-label use) is not permitted.**

**SPECIAL INSTRUCTIONS:** This VFD is being issued in accordance with COP 615-115 for Brook Trout with a withdrawal period of 21 days.

**CONSUMER FEEDING WITH OTHER DRUGS:** This VFD ONLY authorizes the use of the VFD drug(s) cited in this order and is NOT intended to authorize the use of such drugs in combination with any other animal drug(s).

**APPROVED INDICATION:** For control of skin diseases caused by Hemomonius leporis, freshwater crustaceans caused by Vibrio salmonicida, bacterial hemorrhagic septicaemia caused by Aeromonas hydrophila, and pseudomonas diseases.

**CAUTION:** Federal law restricts removal of this feed containing this veterinary feed directive (VFD) drug to use by or on the order of a licensed veterinarian. For use in manufacturing medicated feed and labeled feeds only. For use in dry feeds only. Not for use in liquid feed supplements. Horses, cattle, or chickens are not permitted with this VFD drug. Certain components of animal feeds, including medicated premixes possess properties that may be a potential hazard to a person of particular dietary or medical condition. Certain individuals who are exposed to this drug if consumed by others may require medical supervision. Gastrointestinal and other health and safety. Precautions such as the following should be considered. (a) signs of aspiration and prilocarpin clothing should be worn, dust-mitigating equipment and adequate ventilation should be used, (b) animals should be preventive measures to prevent allergic reaction and appropriate treatment is necessary. Allergic reactions—seek prompt medical treatment if such reactions are suspected. Federal law restricts medicated feed containing this veterinary feed directive (VFD) drug to use by or on the order of a licensed veterinarian.

**RECEIVE WARNING:** Withdraw period of 21 days.

**Veterinarian’s Signature:**

Robert K. Smith DVM
2022-08-13 08:50:35-00:00

**Robert Smith**

123 B. Hwy 63
Don 9
Clayton, MO 63043
Phone: 755-888-2671

- This is a legally binding equivalent of a handwritten signature.

- I certify, as a licensed veterinarian, that the above information is accurate and correct. I certify that I have a current client relationship with the owner or manager of the animals.

- This VFD has a minor species specific—see additional pages for more information.

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Antibiotic Use in Aquaculture

- Approx. 1/3 of all fish will not eat the treated feed
- ½ of the 2/3 of the fish do not eat enough to keep the sustained levels for period of time
- Resistance develops with antibiotic use
- Reinfection can occur after use from a contaminated environment
Vaccination

Reduce Stress
# Approved Drugs for Use in Aquaculture

## Flurophenicol

<table>
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<tr>
<th>Product name &amp; supplier</th>
<th>Species</th>
<th>Indication</th>
<th>Dosing</th>
<th>Limitations &amp; Comments</th>
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<tr>
<td>AQUAFUM®</td>
<td>Catfish</td>
<td>Control of bacterial and parasitic diseases</td>
<td>As directed</td>
<td>10 mg/kg for 5 days</td>
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<tr>
<td>AQUAFUM®</td>
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## Formalin

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## Oxycetacrylne Hydrochloride

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<td>OXYTAC®</td>
<td>Salmon</td>
<td>Control of bacterial disease</td>
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## Oxycetacrylne Oxyurate

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## Sulfathiazole & Diaminophosphate

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## Trimethoprim Sulfonate

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**Disclaimer:** Always refer to each product label for specific instructions. The information provided is intended for educational purposes only and should not be used as a substitute for professional veterinary advice. Always consult a veterinarian before administering any drugs.

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**Notes:**
- Veterinary feed duties (VFDs) are a set of regulations that are intended for use in animal feeds. This means that VFDs are only intended for use in the diet of the animal for which they are prescribed.
- Feeder fish are not intended for human consumption.

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**Labels:**
- Approved drugs are drugs that are approved by the U.S. Food and Drug Administration (FDA) for use in aquaculture.

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**Key:**
- **Catfish**
- **All fish**
- **Salmon**
- **Shrimp**
- **Tilapia**
- **Sturgeon**
- **Carp**
- **Other species**

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**Contact Information:**
For more information or to report adverse reactions, contact the FDA at 1-800-FDA-1088 or visit www.fda.gov.
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Ave: Lghth 10.86, Wght 6.85, Fin 4.5, Skin 4.56, Bile 14

\[ \text{Average} = 3.575 \]

- N: normal, A: abnormal, G: genital, P: peritoneal, B: bile

**Remarks:**
- N: normal, A: abnormal, G: genital, P: peritoneal, B: bile
Minor Water Parameters

- Alkalinity
- Carbon Dioxide
- Chloride
- Hardness

Refer to established water-quality lab

- Biological Oxygen Demand, Suspended Solids, Total Nitrogen, Total Phosphorus
Biosecurity
Myxobolus sp.