Extending storage time for Rainbow Trout (Oncorhynchus mykiss) milt: The effect of temperature
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**QUESTION**
Can rainbow trout milt (sperm) be stored for longer periods of time and what is the effect of temperature on storage time?

**METHODS**
- Milt collection took place on 20 March 2017; observations began the same day (Fig. 1).
- Milt samples from 15 male trout were divided and stored at two temperatures.
- Motility was checked every 5 days, for a total of 21 days (Fig. 3).  
  - Note: Two different females were used for each temperature on both fertilization days, four females total.
- Egg fertilization rate (% eyed-eggs) was determined on 15 Apr and 26 Apr (Fig. 2A&B and Fig. 7B).

**RESULTS**
- Motility dropped below 50% for most samples by day 10 (Fig. 4).
- Motility slightly higher for samples held at warmer temperature (Fig. 3).  
  - Despite poor motility, fertilization data from days 10 and 21 showed that the colder temperature had higher fecundity rates (Fig. 5A & B).
- Motility was not a good indicator for viability (Fig. 4 & 5).

**HYPOTHESES**
Trout milt stored at 1.7°C will remain viable longer and have a higher fertilization rate than milt stored at 4.2°C, and despite motility, milt stored for longer periods (> 15 days) can still fertilize eggs.

**CONCLUSION**
No strong effect of storage temp on milt storage time based on motility; dropped below 50% (WGFD cutoff) by day 10; interestingly, high fertilization despite poor motility, and higher rate for samples stored at colder temps.