

***Xenopus* Tadpole Feeding**

Frog Holding conditions

Frogs are housed in modular units from Pentair. These units provide a temperature, conductivity and pH controlled environment of recirculating water that is constantly undergoing mechanical, biological and UV filtration.

For the first week, tadpoles are kept in petri dishes and media is exchanged daily (0.1x MMR with gentamycin). Tadpole density is kept to no more than 50 tadpoles in a 100mm petri dish in 64F (*laevis*) or 80F (*tropicalis*) incubators

After the first week, tadpoles are put into static tanks or 200ml+ Beakers. Media exchanged daily (0.1xMMR no gentamycin) and small amounts of Sera Micron is added.

After two weeks, tadpoles are placed into the Pentair unit and air hoses are added.

Laevis Tadpole/Froglet Parameters

Water Temperature: 75F (range 73 – 77F)

pH 7.4 (range 7.2 - 7.6)

Conductivity: 1000 μ S (range 900 - 1100)

Tropicalis Tadpole/Froglet Parameters

Water Temperature: 78F (range 77 – 80F)

pH 7.0 (range 6.8 - 7.2)

Conductivity: 1000 μ S (range 900 - 1100)

Water Quality

NH₃/NH₄: 0 (0 – 0.5)

NO₂⁻: under 1

NO₃⁻: under 40

Alkalinity: over 40

Feeding

Tadpoles and small froglets are fed twice daily, once in the morning and again in the afternoon.

Decrease water flow to each tadpoles tank just prior to feeding tadpoles until at least 2 hours after feeding.

Turn the water off to each tank individually.

Feed **small froglets** a 1:1 of Nasco post-metamorphic crushed brittle and Bio-Oregon Bio Vita Fry 1.2 mm

Feed **larger froglets** a 1:1 of Post-metamorphic frog brittle (medium brittle)/Bio-Oregon Bio Vita Fry 2mm.

Feed very **small tadpoles** only Sera-micron

Feed **larger tadpoles** a combination of Sera-micron with the 1:1 mixture of ground brine shrimp flakes and Nasco crush post-metamorphic brittle resuspended in water from the frog tanks. Use the following feeding guidelines:

Days 1-4: 0.1g sera micron

Days 5-6: 0.25g sera micron

Days 7-11: 0.4g sera micron

Days 12-21: 0.6g sera micron

Days 21-28: 0.4g sera micron + 0.2g finely ground brine shrimp flakes mix

Days 28-35: 0.4g sera micron + 0.4g finely ground brine shrimp flakes mix

35+ days: 0.5g sera micron + 0.5g finely ground brine shrimp flakes mix

Place measured food into 50ml Falcon Tube for each tank. Fill the tube up with system water, shake, and pour into tank.

Bio-Oregon Products (www.bio-oregon.com)

Bio Vita-Fry: Feed sizes 1.2mm and 2.0mm

Nasco Products (www.enasco.com/xenopus/)

Crushed Post-Metamorphic Brittle: SA05964(LM)MX

Post-Metamorphic Brittle: SB29027(LM)MX

Sera Products (www.sera.de/en/home.html)

Sera Micron 50 ml: 00720

Brine Shrimp Direct (<http://www.brineshrimpdirect.com/Brine-Shrimp-Flake-c62.html>)

Brine Shrimp Flake: 2.5 oz – 20 lbs

Density

Tadpoles should be kept at 2-3 tadpoles per liter (40-50 tadpoles in 16L XR3 Nursery Tank).

Post metamorphic froglets can be kept at 1-2 froglets per liter (15-20 froglets in 16L XR3 Tank).