Laboratory and Field Testing of Treatments for White Nose Syndrome: Immediate Funding Need for the Northeast Region

• funded 2011; study in early stages

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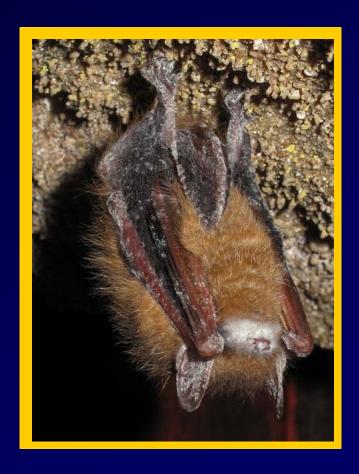
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Problem Addressed

Bats in the Northeastern North America are dying in large numbers due to 'White-nose Syndrome'.

Need: to determine how to mitigate the effects of WNS.

Objective: to develop and test potential treatments for WNS and, if possible, to optimize field treatment protocols.



Methods/ treatments to try:

Collaborative research team is in the process of determining what agents will be tested (based upon ability to kill *Geomyces destructans* - the putative causative agent – and upon safety profiles)

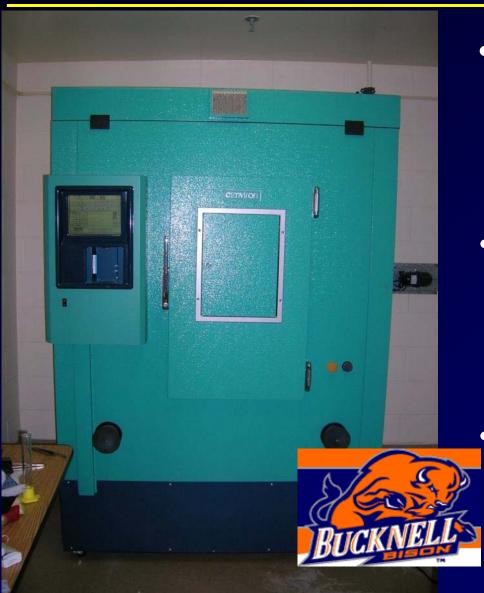
Current Candidates include:

Terbinafine-based treatments (this drug is the safest of the commonly used antifungal pharmaceuticals)

- Slow-release terbinafine subcutaneous implants
- Single use long acting terbinafine cream
- Terbinafine/citral spray

Volatile Organic Compounds

Captive Experiments (field experiments to be determined)



- Will be conducted in highly controlled environmental chambers -The Bucknell Bat Caves
- Affected animals will be captured in the field, treated, and hibernated for 4.5 mo.

• Survivorship and overall health will be assessed.

Status/Utility

The development of successful treatment regimes will allow for the design of mitigation strategies for bats affected by WNS

This includes:

- Treatment of bats in free-ranging conditions
- Treatment of bats in support of 'captive assurance populations' should they be initiated.