

Managing Bats in Buildings

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Buildings & other structures give bats what they need

- Crevices
- Stable, warm temperatures
- Microclimate options
- Predator protection
- Replacement roosts because, like other species of wildlife, bats are losing natural roosts in caves and forests at a rapid rate and have adapted well to human-made structures



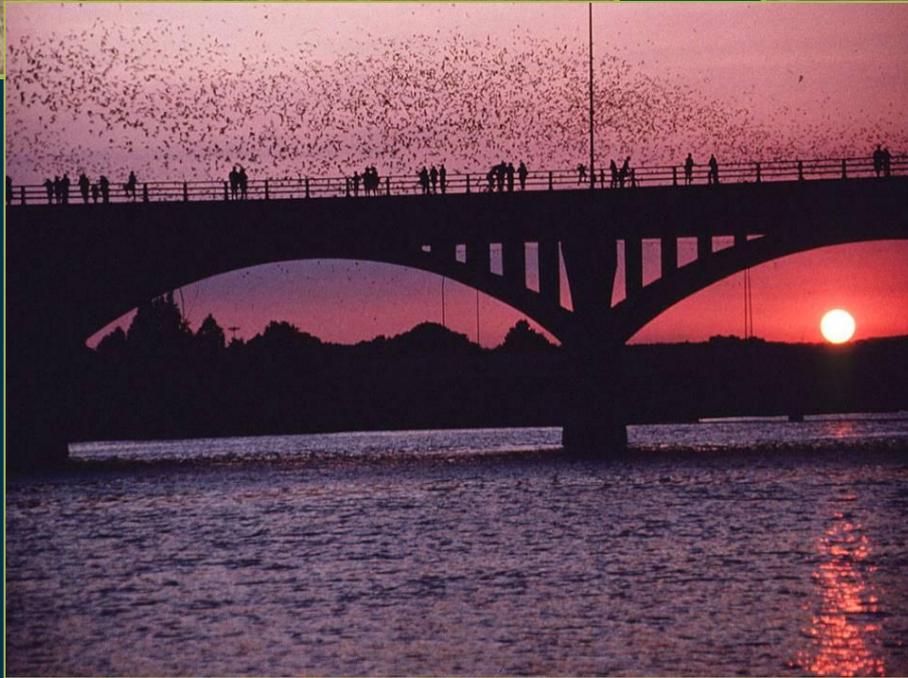
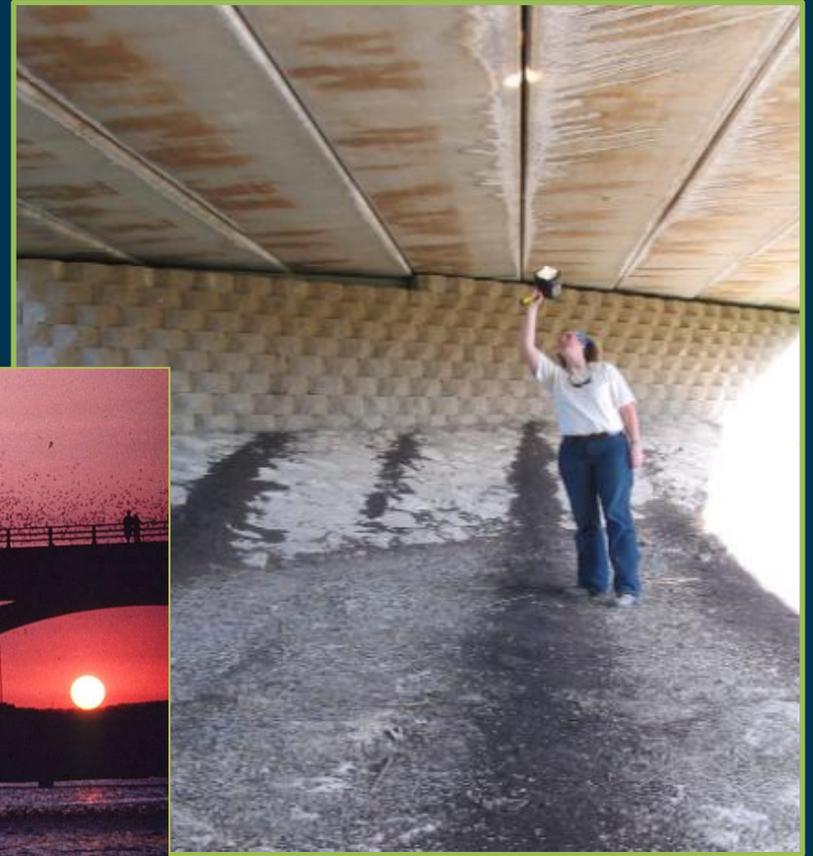
Sports Stadium



**Abandoned Warehouse with ¼ million
Mx free-tailed bats**



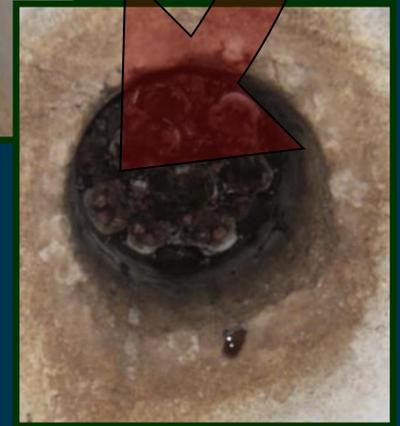
Bridges



Culverts & Tunnels



Dean Gallagher, FFWCC

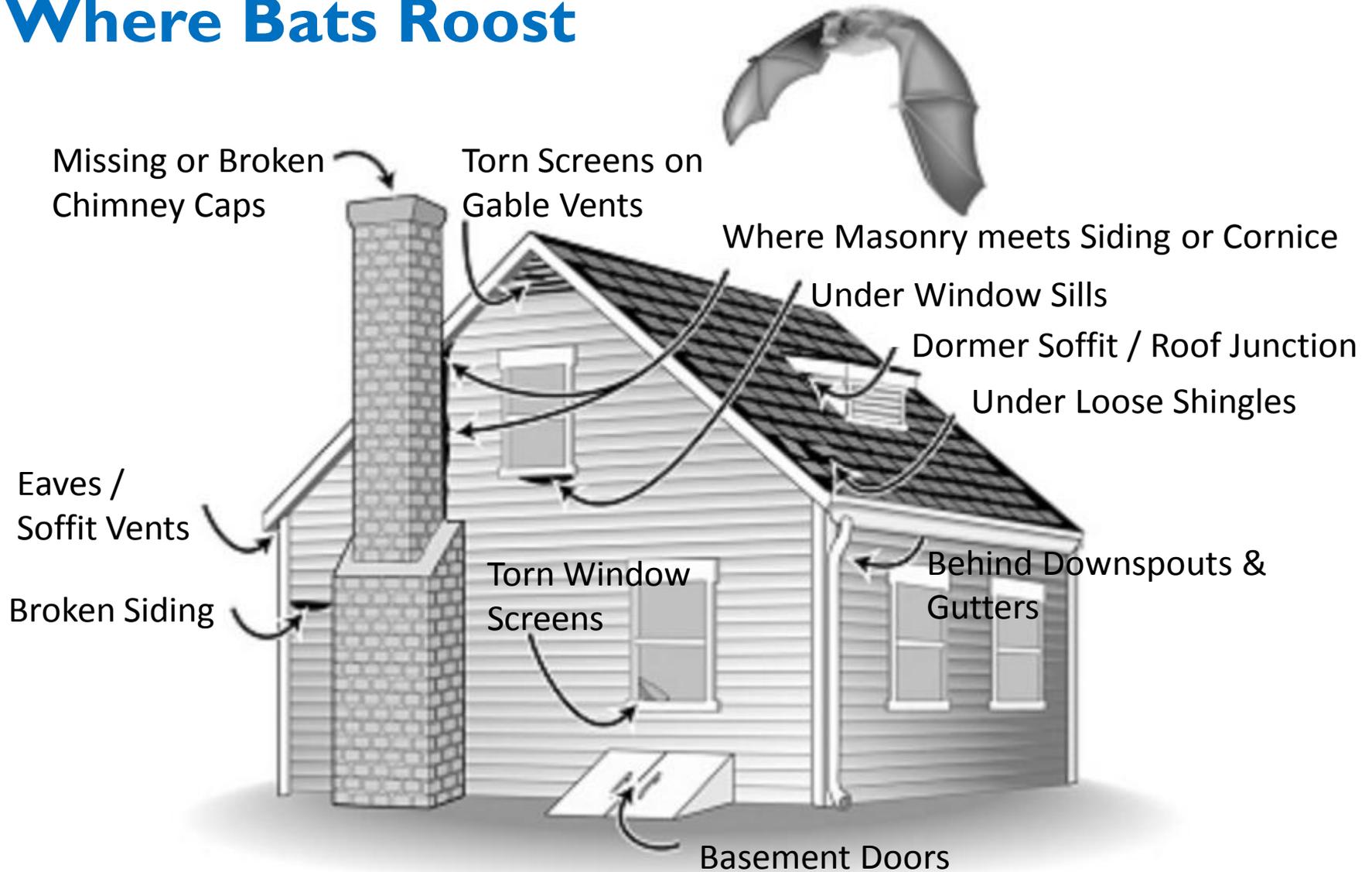


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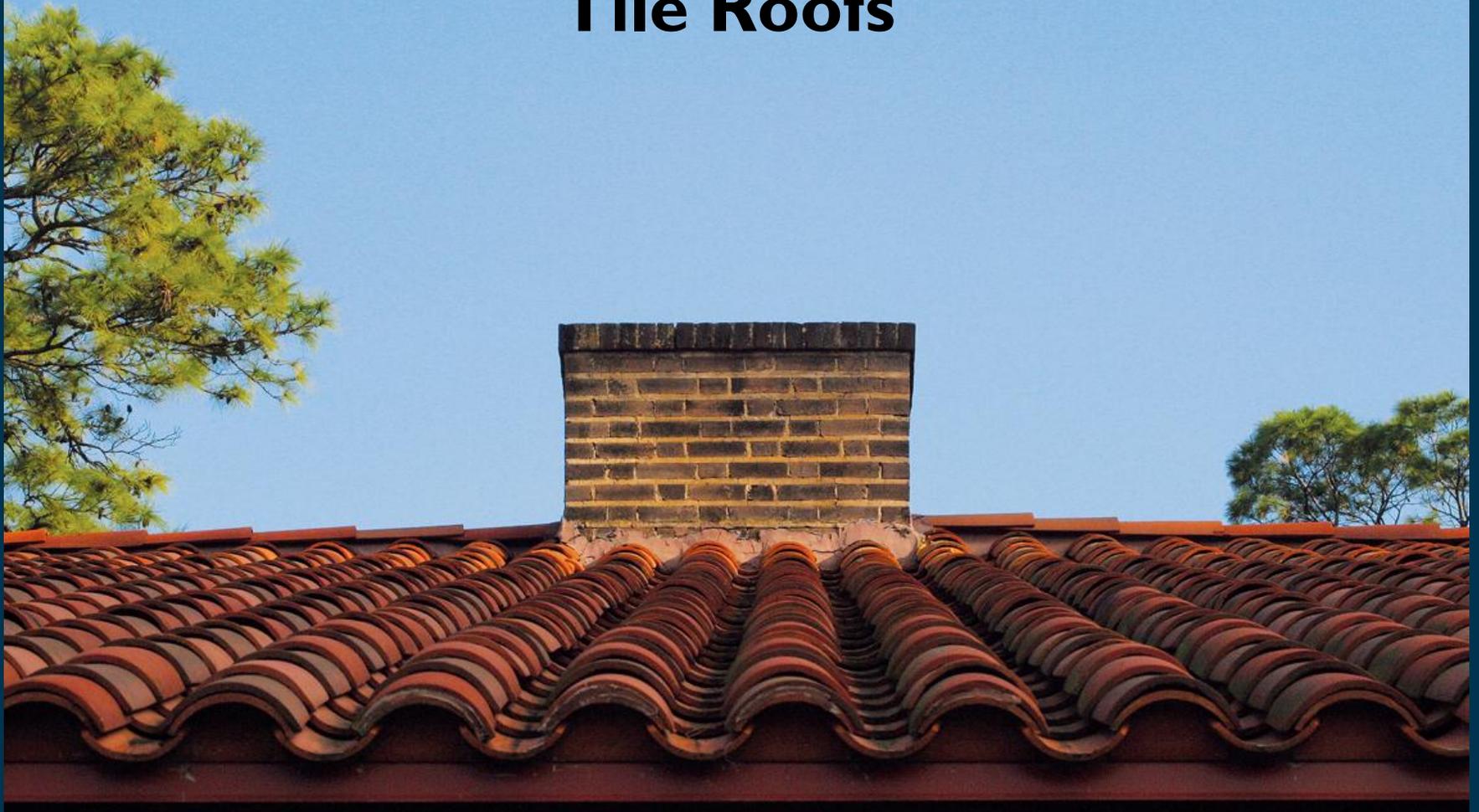
Where Bats Roost—Buildings

- Bats may roost in attics, in dropped ceilings, in boxed eaves and gables, behind siding and masonry, under roof tiles and shingles and behind shutters.
- Bats don't gnaw on wood or wires, but will use holes or cracks $\frac{1}{2}$ " and larger created both by other animals and by **deferred maintenance**.

Where Bats Roost



Tile Roofs



Access Points

➤ Intersections

- ✓ Wall & Roof (along eave and at gable)
- ✓ Dormer & Roof
- ✓ Porch & House
- ✓ Expansion Joints

➤ Penetrations

- ✓ Around poorly sealed pipes, wiring, and vents going through the exterior of a building
- ✓ Areas of Disrepair – Broken shingles and windows, torn screens, rotted fascia and soffit

Intersections of Different Materials



Rock Pocket

Signs of Entry



**Sometimes indicated by
dark stains from body oils
around access points**



Piles of guano beneath access points

**Guano can resemble rodent droppings,
but is soft and crumbles easily;
Guano contains shiny insect parts and
no white material**

Sometimes tenants are temporary

- spring and fall migration
- newly volant young in summer
- through open doors or windows



Ask yourselves:

Is exclusion necessary?

Is it possible to wait them

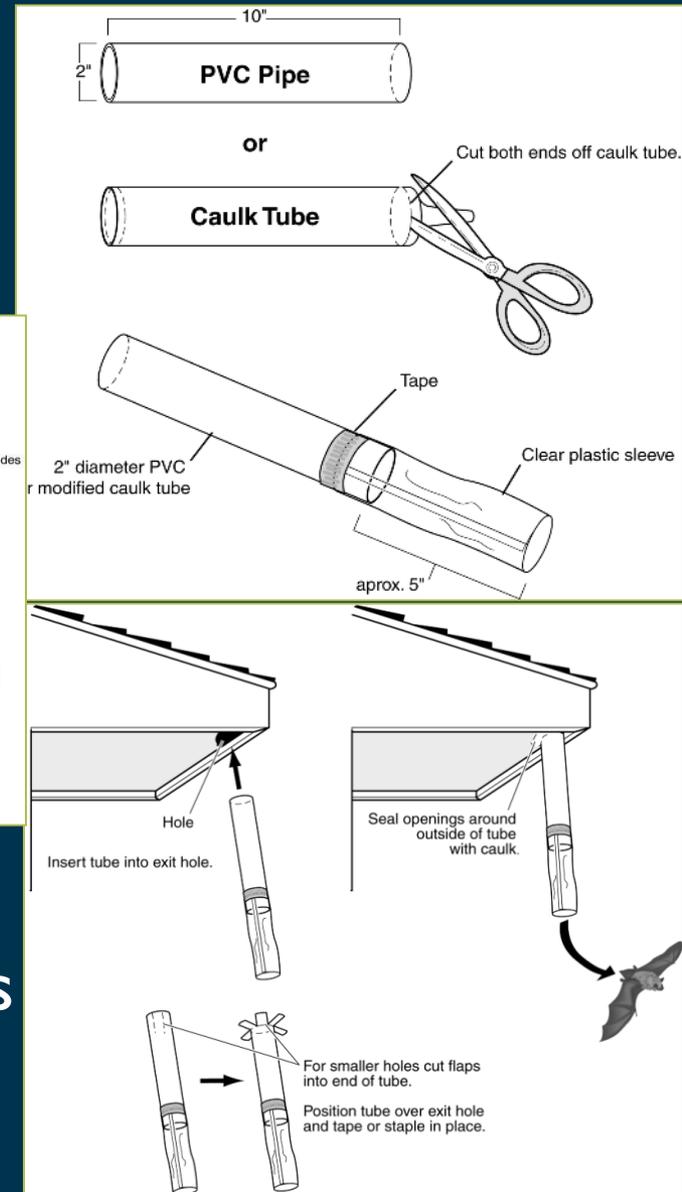
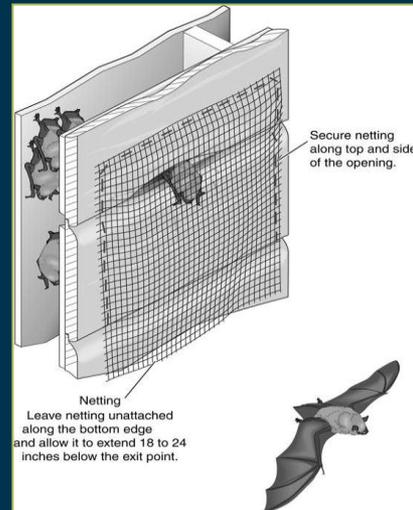
out, or even to live with the situation?

What Doesn't Work?

- **Ultrasonic Devices**
- **Mothballs (Naphthalene)**
- **Trap and Release**
- **Chemicals**
- **Simply closing entrances after bats exit for the evening**

Exclusion: The Only Real, Effective Solution

- Identify entry/exits
- Install one-way valves
- Prevent re-entry
- Provide alternate roost(s)
- NEVER exclude when flightless pups may be present (mid-April through August)





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BAT CONSERVATION
INTERNATIONAL



Bat Houses can accommodate under 50 bats, or 10s of Thousands (and everything in between!)



Follow these steps:

IDENTIFY AREAS OF ENTRY AND EXIT

- Inspections should be conducted during early evening (dusk) and just prior to dawn to locate bats entering or exiting the building.
- Repeat on several nights in most situations, especially during cooler weather.
 - All bats may not leave every night – especially if it is raining or the temperature falls below 50 degrees F.
- After identifying entrances and exits, seal all other potential entry points using caulk, concrete cements made for cracks and crevices, weather stripping, flashing or hardware cloth/polypropylene netting (no larger than 1/4”).

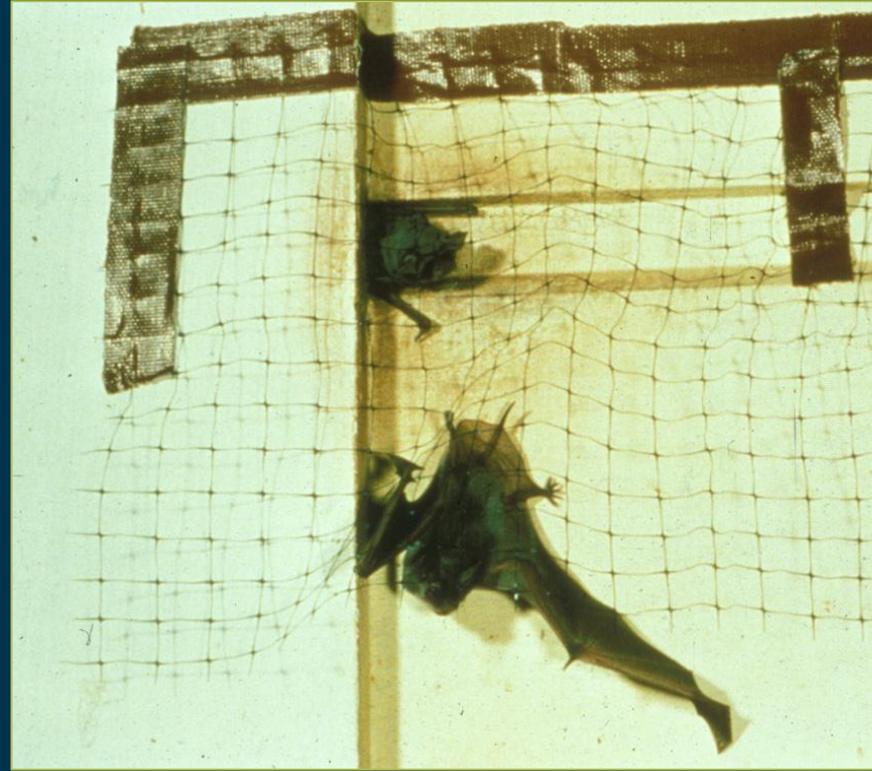
Place exclusion tubes (preferred)
or netting – if netting, use 1/6”
size flexible netting

Leave the devices up for 5-7 days

When you take them off, seal
those areas left open by the devices
the same way you sealed the other
openings previously

Remove guano from interior structures

- Large amounts of guano can attract insect and other pests
- Parasites – mites, fleas, bat bugs – dessicant or insecticide can be used if necessary



Exclusion Information @

www.batcon.org/buildings

[www.flybynightinc.org/
bibguidelines.htm](http://www.flybynightinc.org/bibguidelines.htm)

Under “Bats & People” on the
Home Page

Bat House Information @

- www.batcon.org/bathouse
- [OR](#)
- www.batcon.org
 - Under “Get Involved” on the Home Page

Are Bats Protected?

YES and NO:

Texas Bat Protection Law was enacted by the Texas State Legislature in 2001 and is described in Section 63.101, Parks and Wildlife Code

Environmental Protection Agency, Section 24(c) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

But . . . there are lots of ways around existing regulations, and even in states that offer some protection, unless it is an endangered or threatened species, bats in or on buildings where people live and work are at risk

WHY SAVE BATS?

Intrinsic values

Aesthetic & Ethical

bats are unique products of millions of years of evolution

humans have demonstrated the capability of forcing bats to extinction
... we must do all we can to save bats
(Gary McCracken)

WHY SAVE BATS?

Utilitarian Values

Ecological & Economic

Bats eat crop and forest pests-many pest species are nocturnal so birds are not effective predators

Scientists estimate the million bats lost to White Nose Syndrome in the eastern U.S. would have eaten 694 tons of insects just last year