Torrey Hall:
Picking up the pieces

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PHYSICAL PLANT ALL HANDS MEETING - 2018
Torrey Hall

Originally built in 1863 on the spot where Williams Hall now sits.

The building was moved to its current location, between Billings and Votey, in 1895.
Home to the Pringle Herbarium and Zadock Thompson Natural History Collection

Building stores over 300,000 samples of unique dried plants—some dating back to the 1800’s—and the university’s collection of ~400,000 vertebrate and invertebrate specimens.

History of Torrey Hall

The Pringle Herbarium occupies 3,600 square feet on three floors of Joseph Torrey Hall, at the north end of the campus of the University of Vermont on Colchester Avenue. Torrey Hall was constructed in 1865 as the University’s third library. Considered one of the architectural treasures of the University, it is a substantial three-story brick building with a mansard roof. The collection has been in its current location since 1975. The building is and is likely to remain dedicated to the University’s natural history research collections, as it also houses the vertebrate and invertebrate collections. The collection-processing area, library, research space for staff and graduate students, and classroom occupy the second floor. The bulk of the collection is located on the third floor.
Summer 2017: Building Envelope Renovation Project

Original Project Scope Included:

- Upper roof replacement
- Slate roof restoration
- Chimney restoration
- Masonry repointing
- Window restoration
- Foundation waterproofing
On August 3, 2017 at 8:30 a.m., the Project Scope changed.
Immediate Actions by Physical Plant to Respond

By the end of the day:

- Brought in UVM insurance company to assess the damage.
- G.W. Savage was on site to begin cleanup.
- Vermont Tent - set up a large tent in parking lot as staging area.
- K.R. Adams job trailer (that was no longer being used at Centennial Field) was moved on site.
- PPD Zones loaned portable air conditioners to start drying out salvaged items.
- Freezer truck arrived on site to ship out rare pieces that absolutely needed saving.
- Other areas—Fleming Museum and Billings—were set up as salvage and drying-out areas.
Water damage on all floors

To put out the fire, about 500,000 gallons of water were doused onto the building.
First priority: save the collection

Technical assistance from Bailey-Howe Library staff:

“only have 36 hours to stabilize the wet collections before fungal attack would compromise them.”

According to Dave Barrington:

“Two days of herculean effort by almost 100 volunteers resulted in the salvaging of much of our wet material. We triaged the exposed materials into "only damp," "wet but important and salvageable," and "wet and lowest priority or unsalvageable."
Next priority: save the building

Concern that weight of the collections in heavy metal cabinets, in combination with the weight of the water saturating the walls and floors, would compromise the integrity of the whole building.

Booska Moving and Brown’s Crane services removed the cabinets through the roof.

180 cabinets @ ~1,000 lbs each
Find temporary home for collection

- Storage containers deployed for immediate storage needs
- Dr. Barrington secured space in Jeffords Hall hallways to relocate the cabinets.
- **Blundell House**—which happened to be vacant—needed a quick fit-up to become new temporary location for the Thompson Animal Collection and Teaching laboratory
Blundell House before – (former kitchen, BR and bathroom)
Blundell House after – turned into laboratory space
Cabinets moved to Blundell House
Meanwhile....Back at Torrey Hall: Stabilize and shore up the structure
Get building back to functional condition once all contents were removed.

- Restore electrical service
- Bring in fire alarm system – *by chance, FD&C project at Votey Hall had just removed one*
- Restore heat
- Make it water tight.
electrical system upgrade for building
Mansard Roof

- The design (luckily) worked in reverse. The fireproofing on inner wall (designed to protect the roof if there ever were an interior fire) ended up protecting the interior from the fire on the roof.

Firewall had been installed just weeks prior to the fire. After fire.
Structural trusses damaged by the fire needed reinforcing, allowing for added insulation in upper roof.
3rd floor
(Unplanned) asbestos abatement
Project received much news and media attention
UVM Historic Program Preservation Tour

“…. In October (2017), a team of historic preservation graduate students joined Professor Thomas Visser on a site visit after Torrey Hall had been cleared of water-damaged materials.

Hosted by Scott O’Brien of UVM Physical Plant, the historic preservation team offered technical assistance to help planning for the preservation of the building and its surviving historic features.”
And even a *conspiracy* theory on facebook....
This **fortuitous** series of events....and quick response from many at UVM helped prevent a worse disaster

- Several years earlier, the collection of rare plants had been moved from antique wooden cabinets into modern metal cabinets.
- New firewall/insulation had been installed under mansard roof just **weeks** prior to the fire.
- The Fire Department was aware of the value of the collections inside, thus firefighters first spread waterproof tarps over the most vulnerable collection cabinets on the uppermost level just under the roof, **before** they turned on the hoses.
- A spare job trailer from Centennial Field was available for use right away.
- Volunteers and contractors were available to help ASAP.
- Blundell House was vacant and available for quick re-use as temporary lab for the Herbarium.
Many people, UVM units to thank for response!!

- PPD staff (Zones, TCO, LSS)
- Dr Barrington and staff/volunteers of Pringle Herbarium
- Pat Brown helped facilitate the stakeholders meetings.
- UVM Risk Management staff
- FM Global
- J.A. Morrissey
- Cummings Electric, Cooper Mechanical, Cold Hollow Contracting, Benoit Electric, K.R. Adams
- FD&C,
- Safety Systems of Vermont
- And many others
Once remediation was complete...  
...original project picked up again

*Plus added work to Scope of Project:*
- Insulation in upper roof
- Planning for current code egress/stair
- Planning for elevator (to be able to move cabinets back in)
- Planning for central air conditioning
- New sprinkler system
The End

for now