

## Home Inspection Committee: 2015 Year in Review

*Past Home Inspection Committee Co-Chairs Bill Dillon and Wayne Tharp led an active group in 2015. As 2016 begins, new Co-Chairs John Guy and Angela Kalamaras will continue the tradition of providing valuable information to committee members and planning education events for the WSRAR membership.*

*Here is a summary of some of the items the committee discussed last year.*

Connie Stevens, Executive Director of the North Carolina Onsite Wastewater Contractor Inspector Certification Board, spoke about **septic tanks**:

- One of the biggest issues is not scheduling the septic inspection far enough in advance of closing. The inspection is time consuming with legally required processes, procedures, research and documentation.
- A list of qualified inspectors may be found on the Board's website: [www.ncowcicb.info](http://www.ncowcicb.info) Most inspectors also install, repair and maintain systems. They are required to carry a pocket license card with them to every job/inspection. They are required to attend a class and pass an exam for initial licensure then they are required to attend six hours of continuing education annually.
- Soil scientists are an excellent resource, particularly when deciding what type of septic system is appropriate for the lot and house.
- Inspections often do result in minor damage to the yard.
- State law does not require a septic inspection for every real estate transaction but if one is performed, it must be done by a qualified inspector who includes a prescribed list of items in his/her report. These laws are in place to protect not only the homeowner but also surrounding neighbors as well as the quality of the water table.
- Whether or not items are repaired will depend on the severity of the issue and the wishes of all parties to the transaction (including the lender.)
- Environmental Health technicians inspect all septic systems when they are first installed and also inspect any subsequent repairs.
- If the seller does not have a record of when the system was last pumped, Connie recommends pumping the tank prior to inspection. All tanks should be sufficiently pumped prior to inspections so they can be completely evaluated.
- Defective lines are a serious issue that should be resolved. The initial system should have allowed room for a "repair area" where new lines can be installed.
- If there isn't any available information on the original septic system, the home may be considered to be a two-bedroom house because that is the capacity of many older systems. An inspector will be able to judge whether the existing system can handle greater capacity.
- Washing machines should always drain to septic systems, not the yard, due to health concerns.
- Whether the system requires an "operator" is an important item to look for in every report because it will result in ongoing expenses for the owner (though they are rare in this area.)
- The report is not "pass/fail." It will include all the pertinent facts about the system.
- Cameras may be used to do the inspection but it must be noted on the report if they are used.
- Connie does not permit her inspectors to make written predictions on how long a system will last. If an underwriter insists on having this information, Connie will intercede. She may be reached at 336-202-3126.

Dan Dockery, Chief Building Officer for the Inspections Department, spoke about **permits**:

- Anything structural requires a permit as does anything electrical, plumbing and mechanical unless it is a like-for-like replacement or a minor repair (going behind the wall of the home nearly always necessitates getting a permit.) Currently any repair over \$5,000 requires a permit but a bill has been introduced to legislature requesting this amount be increased to \$15,000.
- If there is no permit history for a substantial repair, renovation, addition, etc. members are encouraged to call Dan. Typically the process to obtain any necessary permits is quick and relatively inexpensive. Most inspections can be performed without causing any damage to the home. Several members reported having very positive experiences with this.
- Not having a permit can impact insurance coverage. It may also make future real estate transactions difficult.
- Home inspection reports may prompt the broker/buyer to investigate whether proper permits were pulled. Square footage that differs substantially from what is noted on the tax card is another red flag.
- If homeowners have pulled a permit but the work has been delayed for any reason, they should apply for "stop work" status.

- Outbuildings should have a permit and should be properly secured to the ground. If they are large enough they may also need to meet building code.
- While repairing or replacing components within HVAC units does not require a permit, Dan noted mismatched components and units are a huge issue. If units, air handlers, or condensers are replaced or if duct work has been rerouted or if additional finished square footage has been added to the home, a permit is required.
- Dan may be reached at [dand@cityofws.org](mailto:dand@cityofws.org) or 336-727-2084. He is available to speak at to local real estate companies.

David Brown, Brown Termite & Pest control, spoke about **common pest issues**:

- The most common non-wood destroying insect in our area is the odorous house ant, a small black ant that can be structurally invasive. They are usually found in kitchens and bathrooms. Sealing cracks around windows and other areas that the ants can use to access the home is the best defense as the insect tends to avoid traditional pesticide.
- Carpenter ants are also common to this area. Although technically considered to be “wood destroying,” they chew wood but do not eat it. They are typically larger in size and black. They usually only chew wood that has moisture issues so the best defense is addressing moisture intrusion.
- Bats are federally protected so they cannot be killed. It is best to exclude them from the home. If there are bats in the home between May 1<sup>st</sup> and August 1<sup>st</sup>, they cannot be removed. Bats must be removed by a licensed damage control expert who is required to file a report and get a permit for the job.
- Always be cautious when removing or killing birds; some are federally protected such as the chimney swift.
- Bedbugs are highly pesticide resistant. If a mattress is infested, considering thoroughly enclosing it to suffocate the bedbugs; if this isn’t effective, the mattress should be properly discarded. Other upholstered items, clothing, suitcases, etc. should be discarded. If the entire house is infested, professionals should be employed and it will likely be a lengthy, multi-step process.
- Stinkbugs can also be difficult to eliminate. The best defense is sealing cracks and crevices.
- The kudzu bug has become prevalent in the Charlotte area but not in this area yet. It can impact agriculture.
- If evidence of subterranean termites is found, an official NC wood destroying insect report will be issued by a licensed pest control operator or his/her employee. If homeowners see any swarming insects, spots on their walls or texture changes to their walls, they should call a pest control expert. If they find what they think is a termite, they should save it to show to the representative. Termite baiting systems are a good option for homeowners who want to limit chemical usage but they can be costly. “Termidor” is an effective liquid solution. There are also wood treatments that can not only prevent termites, but also limit rot and mold.
- It is illegal for homeowners to trap an animal and dump it elsewhere. Some animals are very aggressive, such as raccoons (who are also the number one carrier of rabies in our area.) A wildlife control expert should be employed so the animal can be trapped and euthanized properly.
- If a homeowner has brown spots on surfaces that cause red streaks when wiped, this may be the clover mite. It is not parasitic and it does not damage homes.
- Yellow jackets are the most aggressive stinging insect in our area. Solitary flying insects are always less aggressive than social insects who are defending a nest.
- Black rat snakes are the most common snake in our area; copperheads are far less common and tend to avoid humans. Wildlife control experts should be employed to remove snakes as snake bites, while rarely fatal, can still be very serious.

Jeff Meadows, SERVPRO, spoke about **cleaning up after disasters**:

- Extreme amounts of water can collapse masonry walls, such as the house that was recently flooded when a driver damaged a nearby fire hydrant.
- Approximately 70% of SERVPRO’s business is water removal and dehumidifying homes. It is crucial to remove all moisture from the home and dehumidify as rapidly as possible. Water damage may not always be immediately visible.
- Mold remediation and mitigation should be done in a professional manner (products available to consumers are not effective on porous surfaces and the mold may have spread beyond its original location.) The company doing the remediation and mitigation should not be the same company sampling the mold and/or the air quality.
- Be careful of any companies promising 100% odor removal as odor is highly subjective.
- Stains should be addressed quickly. “Oxi” type products are an effective product available to consumers.

Herb Hovey, HH Hovey Heating & Cooling, spoke about **HVAC units**:

- Geothermal units have become more popular due to generous tax credits but they are still very expensive compared to conventional units. They can be used on most lots due to the different installation methods (open loop, horizontal and vertical, which is the type most commonly installed in this area.) It can be difficult proving value to potential buyers and/or appraisers until consumer demand increases and comparable sales can demonstrate value.
- The new inverter heat pumps are very efficient and do not require back up electric heat. They are less expensive than geothermal units but close in efficiency. The only certain way to distinguish them from conventional heat pumps is by model number.
- The Department of Energy is considering phasing out less efficient gas furnaces and water heaters.
- Herb cautioned against installing mismatched systems. These systems will be less efficient and installing them may void manufacturers' warranties.
- There have been several lawsuits concerning evaporator coils that leak. While some of this is due to manufacturer defect, coils are now exposed to more indoor air pollutants (household chemicals, off-gassing, etc.) due to tightly sealed homes. These pollutants can damage the coils and potentially cause leaks. Some manufacturers have begun sealing their coils with a protective coating.
- Herb recommends ductless mini-systems for small spaces such as enclosed sunrooms and bonus rooms.
- Load calculations should be performed for each unit that is replaced. For new construction, there is not supposed to be a variance of any more than three degrees between the first and second floor.
- Herb said insufficient ductwork can drastically reduce efficiency and comfort. This is often an issue in older homes where the ductwork was originally intended to heat the home only, not cool it.
- The Inspections Division reviews a large number of HVAC installs and replacements. It is important to have proper inspections/permits as this has insurance implications.

Tar Heel Basement Systems gave a presentation on **polyurethane foam injection**:

- THBS provides free inspections and quotes regarding this injection system that lifts concrete. The inspection will include an evaluation of what caused the concrete issue.
- Installers drill holes, install injection ports, inject the foam that compresses the soil and lifts the concrete and then the fill and repair the holes. The foam installs quickly providing a precise lift intended to be a lower cost solution to concrete removal and replacement.
- The foam is not harmful to the environment and does not react with most elements. It is UV sensitive but it is rarely exposed to sunlight due to the installation process.
- THBS provides a five year warranty against a quarter inch or more of settlement. This warranty is transferrable. The product has been in use for more than twenty five years and is now widely used in municipal projects for road and sidewalk repairs.