Have you ever thought of water being your foe? Well, water in its right place is a wonderful natural resource, but if not channeled correctly in your home it can lead to health hazards and illnesses. Leaking plumbing, from under the kitchen and bathroom sink, to under your house can lead to big problems. Humid air and moist things and even wet soil under your house can lead to mold, dust mites, and bacteria growth in your home.

Molds in their right place are beneficial to our natural environment. They help break down dead organic matter like leaves and dead plants. But mold has no place in our homes. Moisture must be present in order for mold to grow so moisture control is the key to being mold-free in your home.

Some potential health problems that can arise from mold exposure according to the EPA include allergic reactions such as sneezing, runny nose, red eyes, and skin rash. It can trigger asthma attacks to people who are allergic to it. Research on the effects of mold exposure is currently ongoing. For more possible health effects concerning mold exposure contact a medical professional.

If you discover that you have mold in your home, the most important thing to remember is that you must resolve the water problem or mold will continue to grow. You should clean up the mold and fix the moisture problem. If the area infected with mold is less than 10 square feet, then you can probably resolve the problem yourself. If the damage is greater than that, EPA suggest that you consult the EPA's Mold Remediation in Schools and Commercial Buildings. These guidelines are applicable to other building structures as well. If you are in doubt, it is better to call in a professional to assess the situation first. If you think that your HVAC system has mold in it or mold growing close to the intake vents, you should refer to EPA's guide “Should You Have the Air Ducts in Your Home Cleaned?” prior to additional actions.

**Tips to Clean up Mold**

- Fix the source of the leak or moisture problem
- Clean mold with detergent and water, and dry thoroughly.
- Porous material may have to be tossed such as ceiling tiles and carpet if they get mold on them.
- Avoid exposing yourself or others to mold. You can wear a N-95 respirator (resembles a dust mask). Gloves and goggles are recommended.
- Do not apply paint or caulking to molded areas.

**Prevention and Control Tips**

- Run a vent or increase ventilation to bathrooms where moisture is prominent.
- Act quickly to clean up water leaks or spills within 24-48 hours to prevent mold growth.
- Maintain roof gutters often.
- Make sure water does not pool around the foundation of your home. It should run away from it.
- Make sure AC drip pans are clean as well as the drain lines not blocked
- Keep indoor humidity under 60 percent. (humidity meters are inexpensive)
- Dry any condensation on windows or pipes immediately. Condensation is usually a sign of elevated humidity.
- If you believe you have a hidden mold problem, it is best to seek professional help to prevent further release of mold spores.
- It is not recommended according to the EPA to use Biocides or chemicals in mold clean up unless professional judgement deems it necessary.

**NOTE:** You must also remove the dead mold as it can still cause allergic reactions.
STORMWATER RUNOFF AND MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Most stormwater runoff is the result of the man-made hydrologic modifications that normally accompany development. The addition of impervious surfaces, soil compaction, and tree and vegetation removal result in alterations to the movement of water through the environment. As interception, evapotranspiration, and infiltration are reduced and precipitation is converted to overland flow, these modifications affect not only the characteristics of the developed site but also the watershed in which the development is located. Stormwater has been identified as one of the leading sources of pollution for all waterbody types in the United States. Furthermore, the impacts of stormwater pollution are not static; they usually increase with more development and urbanization.

Stormwater runoff is generated when precipitation from rain events and snowmelt flows over land or impervious surfaces (paved streets, parking lots, and building rooftops) and does not percolate into the ground. As the runoff flows over the land or impervious surfaces it accumulates debris, chemicals, sediment or other pollutants that could adversely affect water quality if the runoff is discharged untreated. The primary method to control stormwater discharges is the use of best management practices (BMPs). Most stormwater discharges are considered point sources and require coverage by a National Pollutant Discharge Elimination System (NPDES) permit.

Under the NPDES stormwater program, operators of large, medium and small regulated municipal separate storm sewer systems (MS4s) require authorization to discharge pollutants under an NPDES permit. Urbanized areas (cantonment) at Military Facilities fall under these guidelines for small MS4 operators and are required to submit comprehensive permit applications and then are issued individual permits.

The most significant portion of the application is that the Primary Permittee operator or municipal stormwater management program team is required to meet the standard of "reducing pollutants to the Maximum Extent Practicable (MEP)."

Stormwater management programs for small, medium and large MS4s include BMP measures to:

- Identify major outfalls and pollutant loadings;
- Detect and eliminate non-stormwater discharges to the system;
- Reduce pollutants in runoff from industrial, commercial, and residential areas;
- Control stormwater discharges from new development and redevelopment activities; and
- Require post-construction stormwater management.

All of the MS4s are required to submit an annual update on the stormwater management program for that jurisdiction.

More information on the permit application requirements and stormwater management programs for small, medium and large MS4s can be found from the following link: U.S. Environmental Protection Agency: [EPA Stormwater Program - Office of Wastewater Management](https://www.epa.gov/stormwater).
Pollen Count helps Cope with Pollen Season

It’s that dreaded time of year again…. pollen season. I love the spring, but hate the pollen like most. I’ve been fortunate enough to never have had any pollen allergies (knock on wood), but I do see all those suffering around me that are brought down by the yellow blanket that marks the beginning of spring.

Pollen is one of the most widespread allergens in America. There is approximately 67 million individuals plus that suffer from allergies. About 81% of those suffer from pollen allergies also known as Hay fever.

Because pollen is so fine, it is transported so easy thru the air for long distances. Once inhaled, it can irritate your nose, mouth and nasal passages. Different plants have their own unique pollen and you may develop allergies only specific to certain species of plants. The spring blooming plants consist of oak, birch, hickory, pecan, and a few grasses. Ragweed is the most common in the late summer and fall. Runny nose, itchy eyes and throat, coughing and mucous are the most common symptoms from pollen allergies. If you know what pollen allergen your are allergic to it can help you combat it yearly. Your allergist can test you for that. Knowing this will allow you to treat yourself accordingly to reduce the impact they have on your health.

Types of Plants to Cause Pollen Allergies

<table>
<thead>
<tr>
<th>Trees</th>
<th>Birch, Alder, Cedar, Hazelnut, Willow, Plane, Olive and Hornbean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grass- es</td>
<td>Ryegrass and Timothy</td>
</tr>
<tr>
<td>Weeds</td>
<td>Ragweed, Nettle, Mugwort, Goosefoot and Sorrel</td>
</tr>
</tbody>
</table>

Allergy Pollen Count

Pollen season in Georgia normally peaks in early to mid-April, dwindles in mid-May and returns in mid-August according to the information collected by the Atlanta Allergy and Asthma Clinic. A pollen count permits you to see how bad the pollen is and how that might effect you in your area. Pollen.com is a free national service that allows you to view the pollen count anywhere in the nation and give you up to a 5 day forecast. You can also sign up for allergy email alerts. Knowing the pollen count can help you control your symptoms. The scale ranges from zero to 12.

Pollen Count Scale

<table>
<thead>
<tr>
<th>Pollen Count Scale</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0 – 2.4</td>
</tr>
<tr>
<td>Low to Medium</td>
<td>2.5 – 4.8</td>
</tr>
<tr>
<td>Medium</td>
<td>4.9 – 7.2</td>
</tr>
<tr>
<td>Medium to High</td>
<td>7.3 – 9.6</td>
</tr>
<tr>
<td>High</td>
<td>9.7 – 12</td>
</tr>
</tbody>
</table>
Context and Archaeology

Often when the media hypes a controversial remark made by a popular athlete or politician, fans claim that the remark was taken out of context and thus misinterpreted. Context is also important in the field of Archaeology. Context plays not only in the interpretation of the artifacts found at a site but also in how a particular site fits within the historic timeline.

Site Context:

An archaeological site is the physical remains of human activity that could include evidence of buildings, stone tool production, cemeteries, or even rock art. The relationship between artifacts and features (soil stains that represent previous ground disturbance: i.e. garbage pits, storage pits, buildings, or fence posts) makes up the context of an archaeological site. When a site is excavated by professional archaeologist the precise location of these features and artifacts is recorded before it is removed. These relationships help develop a story of past lifeways. For example a circle of postholes, can tell us the shape of houses Native Americans used to build. Also the location of pottery or charcoal within that posthole circle can tell us how the interior of these buildings were organized and what activities took place there. The looting of archaeological sites destroys this context and those sites lose their ability to add to our understanding of history.

Historic Context:

Historic contexts are the broader picture developed from previous archaeological survey and historic records. A historic context is helpful in two different ways. They can help determine a site’s particular significance in the historic timeline and which sites have the potential to add more information to our understanding of history. For large land holders, such as the Army, this is especially important. There have been over 1150 archaeological sites identified on Fort Gordon, but only 155 of these are considered eligible to the National Register of Historic Places and thus protected. Historic contexts also help consolidate separate archaeological surveys around a particular theme or research question. Several years go Fort Gordon received a Legacy research grant to produce a historic context on rural industries (i.e. grist mills and turpentine distilling) through the Sand Hills regions of Georgia, South Carolina, and North Carolina. This project combined previous surveys conducted at military installations in these states to create a regional context. It is a great tool that can be used by archaeological survey teams excavating sites of this type.

As with all aspects of life, without a full understanding of a situation, or context, we prejudge or misinterpret information. Archaeologists start with analyzing the context of a site and then apply it to a greater historic context, which in the end benefits everyone’s better understanding of history.

Note: May is Georgia Archaeology Month. Check out The Society of Georgia Archaeology’s website for more information: http://thesga.org/.
Sources:
~https://www.epa.gov/mold/brief-guide-mold-moisture-and-your-home
http://apps.caes.uga.edu/gafaces/?public=viewStory&pk_id=5775
https://www.pollen.com/allergy/pollen-allergy
https://www.pollen.com/allergy/pollen-allergens
Renee Lewis, Cultural Resources Program Manager
Russell Montcrief, Industrial Stormwater Manager