

RUTGERS COOPERATIVE EXTENSION

NEW JERSEY AGRICULTURAL EXPERIMENT STATION

Basement Flooding Some Simple Remedies

Heavy rain is one of the less welcome signs of spring. For many homeowners, spring showers also mean flooded basements. A recent survey by the U.S. Department of Housing and Urban Development revealed that basement flooding is the most common structural complaint for houses with basements, reported for 26 per cent of such buildings.

While it is possible to spend several thousand dollars to correct such problems, in many cases such expense may not be necessary. Basement flooding can often be corrected by some simple measures easily taken by the homeowner.

Basement flooding is often the result of rainwater that collects against or close to the foundation. Since the foundation is not designed to be watertight, any water that pools next to it will eventually enter the basement.

The best way to discover water pooling near the foundation is to take a walk around the outside of the house during a heavy rainfall (don't try this during a thunderstorm, however). On-site inspection makes it easy to spot large puddles that might disappear shortly after the rain stops. Other common water entry sites include basement window wells and entry doors.

Pooling problems will occur if the ground around the foundation is improperly sloped towards the house. If this is the case, regrading will be necessary, spreading a layer of soil over the area, sloped at 1/2" per foot, for a distance of about 10 feet from the foundation. Gutter and downspout problems can also put water where you don't want it. Discharge from downspouts should be rapidly carried away from the foundation, using either downspout extenders, spill blocks, a gravel-filled trench, buried drainpipe, or a combination of these installations. Defective gutters and downspouts deposit large amounts of water close to the foundation, and should be kept in good repair. These problems will be evident on your walkaround tour and must be corrected, since they nearly always cause basement flooding.

Such problem areas--particularly if associated with basement leaks--may be associated with small underground channels that conduct surface water to small openings in the basement wall. Channels are often created by small leaks that erode soil and enlarge these pathways. To find them, use a trowel or small shovel to probe the soil in suspect areas. When discovered, such channels should be dug out completely and refilled, regrading the surface as well. This is very effective in stopping small leaks in the basement wall.

Small openings in the wall can also be patched using a hydraulic cement, even when the leak is in progress. The best remedy, however, involves removing the cause of the leak whenever possible.

There are many other causes of flooded basements: a high water table or a lot situated at the bottom of a hill, for example. These require more expensive corrections, such as sump pumps and various perimeter drainage systems. However, for those willing to do a little work and attend to some simple maintenance tasks, it is often possible to have a dry basement with only a minimum of expense.

For additional information...

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William Beyer, "How to Dry Out a Wet Basement." **Popular Mechanics**, February 1984, pp 149-152.

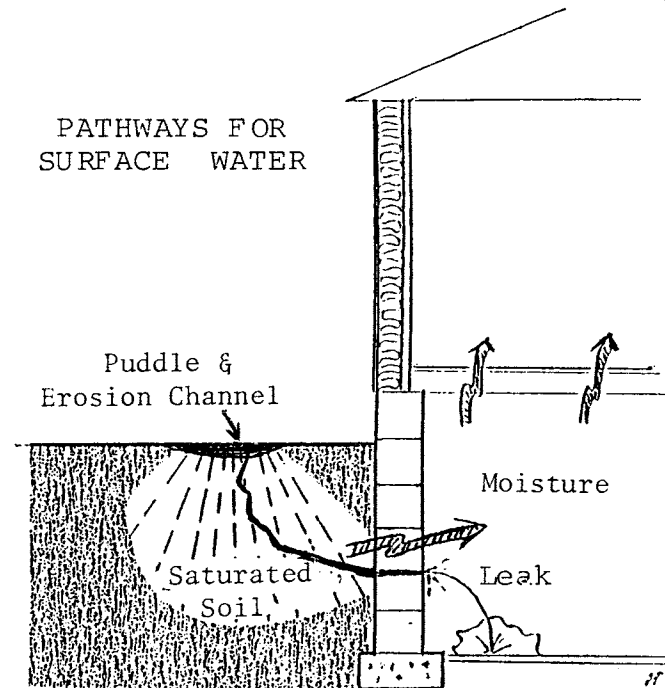
Carolyn Jabs, "Cures for Soggy Yards." **Home Mechanix**, November 1985, pp 60, 62, 64.

Joseph Ponessa, Ph.D., "Basement Perimeter Drain Systems" FS260, Rutgers Cooperative Extension, Rutgers University.

Joseph Ponessa, Ph.D., "When to Ventilate the Basement to Reduce Moisture Problems" FS258, Rutgers Cooperative Extension, Rutgers University.

Joseph Ponessa, Ph.D., "When to Dehumidify the Basement to Reduce Moisture Problems" FS259, Rutgers Cooperative Extension, Rutgers University.

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Some basement leaks result from puddles or rainwater discharge near the foundation. In some soils, erosion channels develop between surface water and holes in the foundation.

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