

Wetland and Ditch Characteristics

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Wetland Characteristics

1. Every wetland occurs in a basin. The wetland basins may be shallow like huge satellite dishes, or deep like funnels.
2. Every wetland basin has a natural rim like a crater. The rim acts like a low dam to keep water from flowing downhill.
3. The natural rim of a wetland is generally low in height and has gentle slopes.
4. Every wetland basin is surrounded by sloped land.
5. Wetland basins may occur where surrounding land has a slope of less than a 1-percent, or where slopes are steeper than 30-percent.
6. Trees and shrubs generally grow on the rim of a wetland.
7. Beaver build dams across streams with a perennial flow of water to create wetlands. Over time beaver dams can turn to soil and become permanent features on the landscape.
8. The soil in wetland basin is generally too wet for trees or shrubs to grow.
9. Trees and shrubs generally grow on mounds, ridges, and islands found in some wetland basins.
10. Wetland restoration often involves identifying the location of the natural rim of the wetland, and then working to rebuild it.

Ditch Characteristics

1. Ditches were dug primarily to drain wetlands.
2. The presence of a ditch is one of the best signs a wetland has been drained.
3. A ditch eliminates standing water and lowers the elevation of groundwater.
4. The ditch lowers the elevation of groundwater equal to the bottom of the ditch.
5. A ditch is generally dug straight with little sinuosity.
6. A ditch can drain wetlands up to one mile away, especially where the ditch intercepts a buried layer of sand or gravel.
7. Wetlands are drained by digging one or more ditches through the natural rim of a wetland.
8. The bottom of the ditch is always dug on a slope so water will drain and not stand in the ditch.
9. Ditches are generally dug on a gradual slope less than 1-percent, so they are less likely to erode.

Wetland and Ditch Characteristics

10. Ditches can be shallow or deep, or short or long.
11. The banks of a ditch may be vertical, or gently sloped.
12. A ditch can separate one large farm field into two smaller fields.
13. Ditches were often dug on property lines so neither farmer would need to cross the ditch.
14. Two ditches meeting at right angles is an excellent sign that a wetland was drained.
15. Ditches are often called streams.
16. Ditches can form stream channels with a bed and banks on land where stream channels historically did not occur.
17. Ditches are often dug along the base of a hill to divert runoff from ephemeral streams.
18. Water is often flowing in the ground under the ditch where soil and organics have accumulated in the ditch.
19. Drainage structures made from rock, wood, clay tile, and plastic were often placed in the bottom of a ditch, and then covered with soil so one may drive and farm over the ditch.
20. The presence of a deep ditch indicates that drainage structures were also used to drain the wetland. Ditches 3-feet or deeper were dug to serve as outlets for buried drains.
21. For every buried drain outlet that is found there are probably 6 others nearby.
22. People almost always underestimate the effectiveness of a ditch at drying wetland.
23. Ditches continue to function long after fields are no longer being farmed.
24. The construction of a ditch can trigger erosion that will continue for hundreds of years.

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