

March 2, 2005  
Vol. 2, No.3

**WETLANDS DEMYSTIFIED**  
Vernal Pools, “Isolated Wetlands”  
By Paul Hennen

From a wetlands standpoint, vernal pools, or “isolated wetlands” as some have called them, have been a controversial subject in Connecticut until recently. The main reason for this lies in the fact that vernal pools are temporary bodies of water and are therefore not always easily identified. Although they are essential breeding pools for a few obligate animal species, obligate meaning vernal pools are their only breeding place, are not in themselves considered as very important by some people. While the value of these animals to mankind may be a matter of opinion, municipal wetlands commissions have little choice under Connecticut’s Wetlands and Watercourses Act (IWWA) but to protect such environmentally sensitive areas. The focus of this article will be to provide some background as to why vernal pools have been a controversial issue until now and to address some of the important issues concerning their preservation.

One might ask, “What is a vernal pool and what do they look like?” At this time there is no Connecticut regulatory definition of a vernal pool. Vernal of course means “spring”. A pool is no more than a pond or body of water. However, section 22a-38(16) of the Connecticut Inland Wetlands And Watercourses Act (IWWA) defines watercourses as rivers, streams, brooks, ponds, bogs, etc., artificial or natural, private or public to include “vernal” bodies of water contained within [the State of Connecticut]. A vernal pool therefore is considered a watercourse if nothing else. As an aside, it is interesting to note that Connecticut’s Department of Environmental Protection (DEP) considers a “soil scientist” as the only person officially qualified to identify a wetland, since wetlands can only be determined by soil type and so requires at least some knowledge and experience. A watercourse on the other hand can be identified by anyone. So long as a vernal pool meets the broader definition of a watercourse, you or I can identify one as such. What then is a vernal pool? Daniel F. Donahue, Wetland Ecologist and author of *A Guide To The Vernal Pool Wetlands Of Connecticut* defines a vernal pool as a wetland with certain physical characteristics: (1) a watercourse that contains water for approximately two months during the spring and lacks a permanent bank, (2) dries out in most years usually by late summer, (3) can be natural or man-made and usually lacks a permanent outlet or any fish population. Of course, there is much more to a vernal pool than what this physical definition implies. A vernal pool is also a seething microcosm of biological activity and, as we have said, an essential breeding habitat to certain obligate animal species. Other wildlife may use vernal pools as food or water source, but the vernal pool in their case is not vital to their existence. To learn more about vernal pools and why they are environmentally important, I urge you read Paula Coughlin’s excellent article about vernal pools in this issue of the *Pomfret Times*.

So why are vernal pools controversial? As a wetlands issue and thus a regulated watercourse like any other, it would seem rather straightforward. However, as I have mentioned before, wetland issues are not always straightforward. It began some years ago when a developer, AvalonBay Communities, Inc. challenged in Superior Court the Wilton Inland Wetlands Commission's denial of its wetlands permit application for an affordable housing project. According to the Commission, the applicant failed to demonstrate in a revised plan that no alternative [in the project's design] was available to the applicant that would have less impact on certain vernal pool obligate species. It should be noted that the proposed activities were not within a defined regulated area but [if the project were approved] would adversely impact the upland habitat of the spotted salamander, a vernal pool obligate species found on the property during the permitting process. It is interesting to note that spotted salamanders, which are a kind of mole salamander, are known to migrate up to 386 feet from the vernal pool where they were born and are "obligated" to return to that temporary body of water to breed and thus give birth to their next generation during the spring of the following year. Other obligate species may migrate even farther. For example, the wood frog may be found up to 3,835 feet from its breeding vernal pool. It appears that it was the Wilton's Commission's logic that the spotted salamander should be protected even though the few that were seen were not actually found in a vernal pool or any other kind of wetland, but rather in their extended upland habitat.

In its decision, the Superior Court agreed with the Wilton Wetlands Commission. In part that decision was based on the now famous State Supreme Court ruling, known as the Queach Decision, that clarified and greatly expanded the upland area review authority of municipal wetlands commissions in our state. But the applicant appealed the Superior Court's decision and at that point, until the judiciary resolved the matter, Connecticut's municipal wetlands commissions had little recourse but to ignore the issue of wetlands wildlife protection and the importance of these sensitive areas as habitat for both plants and animals. During the appeal, commissions could only protect wetlands and watercourses from physical damage. Then the other shoe fell. In 2003, the State Supreme Court found in favor of the applicant, AvalonBay Communities, Inc. The Connecticut Builder's Association was ecstatic!

In the Supreme Court's decision the primary issue was, "Did the Wilton IWWC have authority to protect wildlife in upland areas that may rely on wetlands for part of their life-cycle?" The Court said no. As part of its reasoning the Court made clear that wetlands are defined by soil type but watercourses are only bodies of water and thus "limited to their physical characteristics". Therefore, biodiversity [wetland and watercourse habitat] could not be afforded protection under the State's IWWA. In effect the Court determined that the protection of wildlife was "secondary" to protecting the physical characteristics of wetlands and watercourses. Were environmentalist and some members of wetlands commissions upset by this argument? You can be certain that they were and so were Attorney General Richard Blumenthal and DEP Commissioner Arthur Rocque and a large number of important legislators.

Connecticut's General assembly responded to the Supreme Court's AvalonBay decision this past year by amending section 22a-41 of the IWWA to specifically include aquatic plant and animal species and their habitats within the meaning of wetlands and watercourses. The law now says that, (1) "wetlands or watercourses" include aquatic, plant or animal life and their habitats in wetlands and watercourses, and (2) "habitats" means areas or environments in which an organism or biological population normally lives or occurs. However, the law also states that a municipal inland wetlands agency shall not deny or condition an application for a regulated activity in an area outside of wetlands or watercourses on the basis of an impact or effect on aquatic, plant, or animal life unless such activity will likely impact or affect the physical characteristics of such wetlands or watercourses. It seems logical that for a wetlands commission to deny or condition an application on the basis of adverse impact under these conditions or to judge an impact so severe as to change the physical aspects of a wetlands or watercourse in some negative way, would require convincing expert testimony on the commissions part. There may be circumstances under which a wetlands commission would pursue this course of action, but for now it is likely that all wildlife found outside of wetlands, vernal pool obligate species included, will not be protected under state law. It should not be overlooked, however, that in its response to the State Supreme Court's ruling, the General Assembly broadened its definition of wetlands and watercourses to include aquatic, plant and animal life and habitat protection, vernal pool or not. All life in wetlands and watercourses, which depend on these places for habitat may be protected. That means the wetland and/or watercourse itself must be protected if this goal is to be achieved. The bullfrog and the green frog and all the other frogs, turtles, snakes and the birds that depend on these unique places now come under the protection of our Commission when warranted. Upland areas are a different issue, and there, in terms of habitat protection, our jurisdiction is limited. But in our obligation to protect our Town's important wetlands and watercourses, upland area review remains a concern and we as a Commission have other options, such as conservation easements, riparian and vegetative filter strip buffers and construction setbacks from wetlands and watercourses as required by our regulations when appropriate.

In a past article I mentioned the conservation easement as a method by which the Wetlands Commission can safeguard our Town's important water resources for now and for future generations. Riparian and vegetative filter strip buffers, which we discussed in our last article, are also important ways to protect important wetlands and watercourses. When they are used in conjunction with a wetlands or watercourse conservation easement, they can prove to be very effective if managed properly by the property owner. Conservation easements will be the topic of our next article in the April issue of the *Pomfret Times*. Conservation easements are a controversial subject. When required as a condition of wetlands permit approval, are we taking something away from the property owner? Are we as a Commission denying someone the absolute use of his or her property? There are some that say yes! What do you think? I hope you will stay tuned.