

Burlington's Diminishing Green Space

By Paul Bierman

Zoning or not, like it or not, green space is disappearing from Burlington's Hill Section. Take a walk down Willard Street. Most days you'll see 3, 4, 5 cars parked squarely on lawns. Look harder and you'll see driveways that were once a single car width but now hold six or eight cars, the wheels of which spill onto muddy ruts either side of the pavement. You'll see sidewalks now used for parking spots and whole back yards covered in gravel.



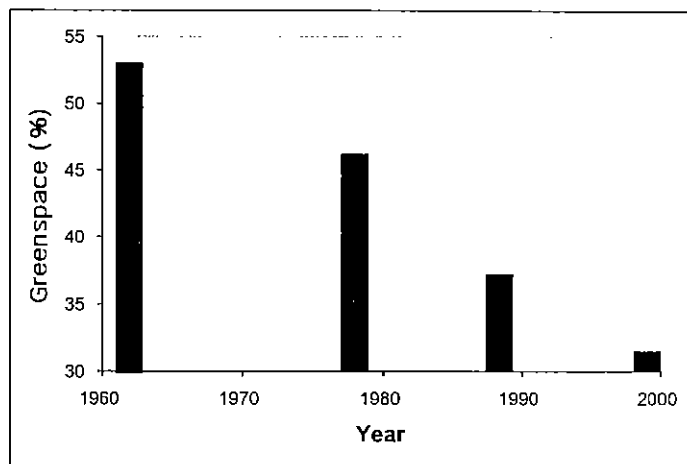
Cars parked on what used to be lawn adjacent to 44 S. Willard Street. The green space has been so heavily compacted that rainfall can no longer soak in.

Over the last 20 years, acres of our city's lawns have become parking places, most conversion done without permits and most done in violation of zoning codes that mandate at least 65% open space in residential neighborhoods. There has been little effective response from the city government even though nearly half the open space on Buell, Loomis, and Willard Streets has disappeared in the last 20 years.

The impact on Burlington is significant. The appearance of whole neighborhoods has changed. Runoff into the city sewers from these streets has increased by tens of percent in big storms. In such storms, sewage treatment plants can't keep up, incompletely treated sewage spills into Lake Champlain, and just as happened this past June, our beaches are closed. Green space loss is not only a preservation issue, it is an environmental issue

that affects every resident of the Champlain basin.

Over the past 4 years, Geology and Environmental Science students at the University of Vermont have been using 40 years of aerial photographs taken by the State for tax mapping to find out what was parked where. The photos are very high resolution, allowing us to clearly identify where cars are parked and what areas were used for parking in 1962, 1978, 1988, and 1999. Field mapping verifies current conditions and identifies green space losses that have occurred since the 1999 photos were taken. While field checking their maps, students go door to door and survey occupants. We know how many houses in our study areas are rented, how many are owner occupied, and how many vehicles are associated with each house.



Green space has been steadily lost from Buell, Loomis, and Willard Streets over the past 40 years despite zoning controls designed to prevent such loss.

So, what have we learned? First, illegal green space loss in the areas we have studied is a problem overwhelmingly associated with rental properties; few owner occupants destroy their yards for parking. Second, most rental units in our study area house at least one student. On average, student-occupied units have 3 times more vehicles and occupants than units occupied by professionals and retirees. Greenspace loss stems directly from high occupant and vehicle density; some Victorian residential neighborhoods have effectively become off-campus dormitories without the infrastructure (such as parking structures) to house people and their automobiles at such high density. Third, there is a predictable sequence by which green space is lost. Cars park on lawns, compacting the soil so that water ponds. Landlords then fill the muddy ruts with gravel. Later, the

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Tidbits

Famous Architects and their Burlington Works

This Fall, Steven Levine from the University of Vermont's Historic Preservation Program is working on developing a brochure for Preservation Burlington as part of his advocacy project. The brochure will feature the works of famous architects with in Burlington. The guide will highlight the works of architects such as H.H. Richardson and McKim, Mead and White and it will provide background information, pictures and a map. Stay tuned for further details and information.

Guided Walking Tours on the Horizon

Members of Preservation Burlington have been working with local residents, the Church Street Marketplace and the Burlington Business Association in creating a guided walking tour. The tour will start from lower Church Street and then work its way around City Hall Park and then up Church Street and the outlying streets. The group hopes to establish a scheduled guided tour once a weekend during the warm months which would benefit visitors and residents alike. In addition to the tours within the Church Street area, the Lake Champlain Maritime Museum leads guided tours through the waterfront area. Once the Church Street area tour is firmly established, it is our hope to have guided tours of other historically significant Burlington neighborhoods such as the Hill Section, the Old North End and the South End.

Until the tours are up and running or if you feel like touring Burlington on your own time, Preservation Burlington has published three self-guided tours of three Burlington neighborhoods – the Waterfront and Downtown, the Old North End and the Hill Section. Please contact Brian Knight at 802-238-2918 or brian@preservationburlington.org for additional tour information.

Green space (cont.)

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gravel parking areas are paved. Finally, the city formalizes the parking expansion by setting new curbs to match the expanded driveways.

Our work continues. Using experimental plots on campus, three undergraduate students are studying how greenspace compacted by car tires can best be restored. Our initial work shows that pick axing and roto tilling, followed by an inch or two of compost, can bring back green grass where only packed dirt existed several months before. Just as important, such remediation can increase the rate at which rain soaks in by five to ten times. On our plots, rainfall that used to run off carrying sediment and other pollutants to the Lake, now soaks in.

To learn more about what we have found and what we are doing, visit our web site at geology.uvm.edu/urbanhydro. If you see cars on lawns or if you know of lawns converted to parking areas without permits, you can notify Ray O'Connor, Burlington Code Enforcement (865-7274). If the problem is not resolved quickly or to your satisfaction, call the mayor's office or your city councilor. They need to hear your opinions.

Revolving Loan Fund (Cont.)

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helping them offset some of the costs, and by offering technical advice. "There are many great examples of revolving loan programs just like this one across the country. These programs have been very successful at providing an economic opportunity for people to repair their historic buildings and have provided a useful tool for communities.

"Arne Hammarlund, our loan officer, was very receptive to the idea of this revolving loan program and he worked hard to make it happen," concluded Knight. "Socially Responsible Banking did a great job meeting our needs and our time frame."

