

PLAY
EQUIPMENT

OPEN PLAY

PICNIC TABLES
IN WOODED
AREA

DRINKING
FOUNTAIN

BLDG.

4' CHAIN
LINK
FENCE

BALL FIELD

**What's Wrong
With This Picture?**

PAR-TICK-ULAR PARK

MAIN

STREET

Incorporate Tick Safe Zone Practices in Your Work.

This guide focuses on "tick safe" design ideas for parks, playgrounds, playing fields, and recreational areas.

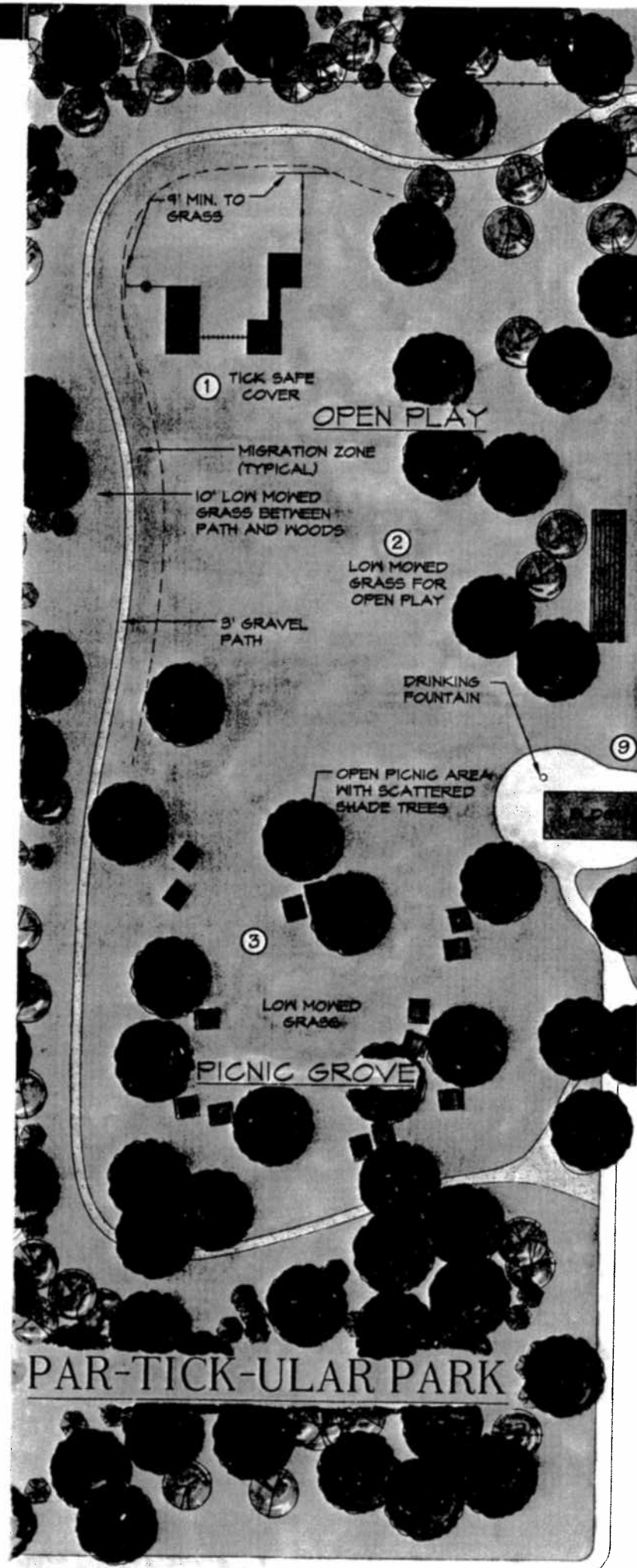
Recreational, school, and residential landscape characteristics can influence the risk of exposure to deer ticks (*Ixodes scapularis*), Lyme disease and other tick-borne diseases. Deer ticks live in the woods, sustained by their animal hosts (white-footed mice, chipmunks and deer) and the higher humidity levels of the woodland. Lyme disease cases are highly correlated with the activity of infected nymphal ticks and 71% of cases occur in the summer.¹ The tiny nymphal deer tick makes its home in the leaf litter that accumulates on the forest floor, around stone walls, and under ground covers.

What is a Tick Safe Zone?

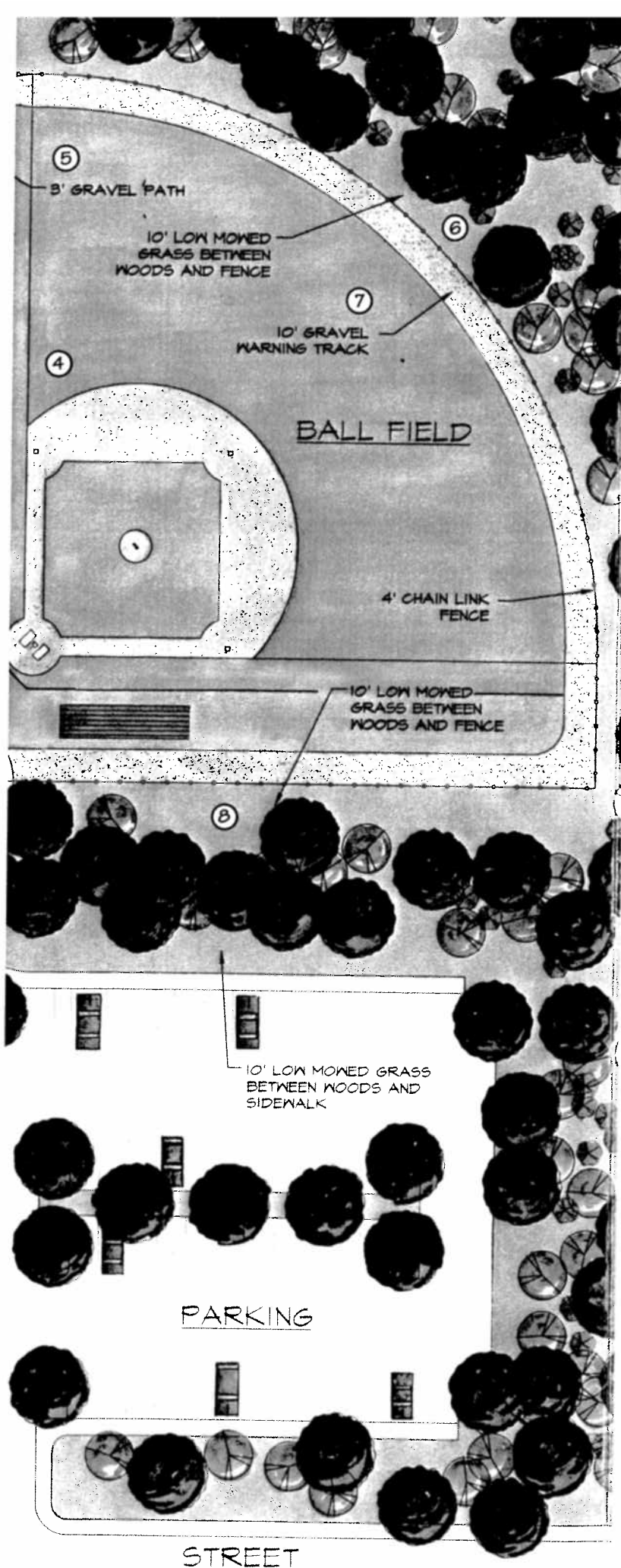
① A "tick safe zone" is composed of lawn, is as sunny as possible, and begins nine feet or more from the edge of the woods or meadows. It should surround fields, playgrounds, recreational areas, and schools adjacent to buildings, and encompass the areas that are regularly used. This includes walkways, eating and entertainment areas, storage areas and gardens. The tick safe zone takes advantage of the tick's own biology and behavior to keep ticks away from frequently used areas and reduce tick numbers.

How Tick Safe Are the Fields/Recreational Areas You Develop?

You can reduce the number of deer ticks on playing fields and recreational areas by the way you design the landscape. Placing fields, playgrounds, and recreational areas as far away from the woods and meadows as possible can significantly reduce the number of children and adults exposed to ticks at the edges of the fields. Ticks are unlikely to be encountered on open playing fields, but are picked up walking to the field, chasing balls into the edges, or standing or playing at field edges. Think about "landscaping the edge."



¹ Stafford, Kirby C. III, Carter, Matthew L., Magnarelli, Louis A., Ertel, Starr-Hope, & Mshar, Patricia A. (1998). Temporal Correlations between Tick Abundance and Prevalence of Ticks Infected with *Borrelia burgdorferi* and Increasing Incidence of Lyme Disease. *Journal of Clinical Microbiology*, 36, 1240-1244



Tick Safe Landscaping Techniques

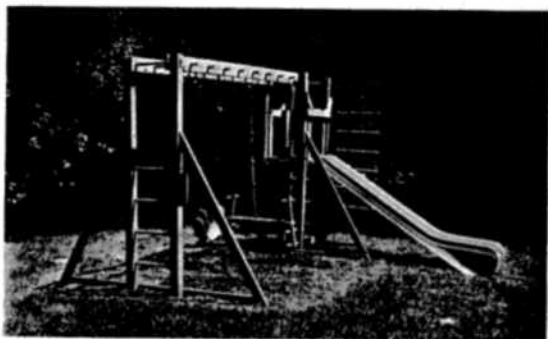
When developing locations for parks, fields and recreational areas, consider the following landscaping techniques:

- ② Keep grass on recreational areas cut relatively short and prune trees to let sun shine in.
- ③ Place picnic tables and play equipment in the sun and away from the woods.
- ④ Place fields/play areas as far away from the woods and stone walls as possible.
- ⑤ Create a wide lawn buffer between the playing field and woodland, stone wall or unmanaged edge. If the field butts up against high meadows or wooded areas, place a 9-foot-wide woodchip or gravel buffer between the field and the woods edge. Properly maintained, a xeric barrier makes it more difficult for the ticks to migrate from the woods to the field and serves as a visible reminder that a child or adult is entering a potentially tick infested area.²
- ⑥ On smaller fields adjacent to woods, consider enclosing the recreational area with a four-foot chain link fence. Keep the area between the fence and woods well maintained.
- ⑦ Surround perimeters of recreational fields or walkways with a 9-foot gravel warning track. Ground covers such as pachysandra or ivy should not be used, as mice and other small animals that carry ticks seek shelter in ground covers.
- ⑧ Place fields/play areas away from ponds and wetlands, and breeding sites for mosquitoes and other insects that can carry disease.
- ⑨ Landscape using deer-resistant plantings. Do not attract deer to the recreational area by planting flowers, shrubs and trees that they like to eat. Although no plant is completely resistant to deer damage, some plants are more susceptible than others. Lists of deer-resistant plantings are available from your local garden center, nursery, or from the Connecticut Agricultural Experiment Station (CAES).³

² Stafford, K.C. (2003). *Integrated Tick Management and Prevention at Tick Borne Diseases*. Unpublished manuscript, Connecticut Agricultural Experiment Station (CAES), New Haven (forthcoming)

³ Ward, J.S. (2000). Limiting deer browse damage to landscape plant. *The Connecticut Agricultural Experiment Station Bulletin 968* [online]. Available: <http://www.caes.state.ct.us/Bulletins/2000/b968.pdf> [17 July 2003]

Remember, some simple landscape design and maintenance practices may help reduce the risk of tick-borne diseases.



➡ Reduce tick numbers in play areas by placing play equipment in the sun and away from the woods. As shown in this photo, place woodchips under the equipment and keep the surrounding area well manicured.



➡ Tick habitats are plentiful on this ball field. Leaf litter and debris should be cleared away. Outfield grass should be mowed on a regular basis, and a gravel warning track should be installed.



➡ This walking trail is a great example of a tick safe zone. The trail is clear of all debris and low-lying shrubs. Grass is kept low and the trees are well manicured to allow for plenty of sunlight.

For more information on Tick Safe Practices contact the Westport Weston Health District 203-227-9571 or email us at info@wwhd.org

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