

Building a Backyard Putting Green

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Precautions

- The quality of a backyard putting green is less than that on golf courses. In other words, a backyard putting green is not the same as a green on a golf course.
- Backyard putting greens require specialized equipment, frequent mowings (4-6 times weekly), irrigation, pesticide applications and more.
- Installation is labor-intensive and expensive.
- **My advice is not to build a backyard putting green!**

The paragraphs below should provide you some additional information about building a backyard putting green if you are not dissuaded by the above warnings. It is not meant to be a complete guide, but simply to help point you in the right direction.

Location

- **Full sun** – The green should be located in full sun for optimum turf growth and performance. Partial afternoon or evening shade would be acceptable.
- **Air flow** – Locate the green so the wind (air flow) is not blocked by trees or buildings.
- Do not locate the green in a depression or a low area that is poorly drained.

Construction

- **Rootzone** – Ideally, a United States Golf Association (USGA) specification green <http://www.usga.org/course_care/course_construction/Course-Construction-and-Renovation/> should be constructed. These specifications are designed to provide the most ideal conditions necessary for the success of a putting green. However, the cost of a USGA specification green is high. If this is not economically feasible, then a native soil green can be constructed. Most soils except clay would be suitable but not ideal for building a backyard putting green. A sandy loam soil would make the best native soil rootzone.
- **Surface drainage** – Contours on the green should facilitate rapid surface drainage of water. Failure to do so will result in a failure of the green. Do not create any pockets or low areas where water will stand. Water should drain off the green in more than one direction.
- **Subsurface drainage** – Subsurface tile drains should also be installed according to USGA specifications. Subsurface drains should be spaced closer together (less than 10 feet apart) to facilitate more rapid drainage if a putting green is built on a native soil mixture.

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- **Grass (Northern Arkansas)** – Creeping bentgrass is the recommended grass species for putting greens in the northern half of Arkansas. The seeding rate is 1.0 lb seed per 1,000 sq ft. Sanitary seeding practices are crucial as creeping bentgrass can become a troublesome weed in lawns. Creeping bentgrass seed can be purchased from seed supply houses or on the Internet. PennCross creeping bentgrass has been used by golf course superintendents for years and would be a good cultivar for use on a backyard putting green. Other improved cultivars exist, but they often require higher maintenance than PennCross. For more information on cultivars that perform well in Arkansas, visit <http://turf.uark.edu/research/reports.html/>.
- **Grass (Southern Arkansas)** – Hybrid bermudagrass is the recommended grass species of putting greens in the southern half of Arkansas. Tifdwarf is a cultivar used historically in Arkansas for golf course putting greens where it can receive the necessary level of maintenance. Newer cultivars are also available, including Miniverde and TifEagle. These newer cultivars are better adapted to lower mowing heights, but they also require increased maintenance. You will want to plant using sprigs at 15 or more bushels per 1,000 sq ft.
- **Irrigation** – Water the green in the early morning (5-7 a.m.) hours. Only water when the green shows signs of drought stress (purplish color that easily shows footprinting). The goal is deep and infrequent irrigation.
- **Pests** – Several insects and diseases are potential pests of creeping bentgrass greens. The first step in pest control is to produce a dense, actively growing stand of grass. However, it may be necessary to occasionally apply pesticides for disease and insect control.
- **Topdressing** – Topdressing is the application of a thin layer of sand on top of the putting surface. Apply a layer of topdressing approximately 1/8 inch thick of screened sand to putting surface. If you have a sand rootzone, use a similar-sized sand for topdressing. If your putting green has a soil-based rootzone, sand can be used for topdressing since it is easier to apply than soil. Use a push broom to work the topdressing down through the turf canopy. Apply topdressing in early May and late September at a minimum and more frequently if possible.
- Aerification is also necessary to relieve compaction and improve water infiltration. However, reciprocating aerifiers, which do the best job on this surface, are not commonly available from most equipment rental stores.

Maintenance

- **Mowing** – The green should be mowed at $\frac{5}{32}$ to $\frac{1}{4}$ inch four or more times per week with a reel-mower. Both manual (McLane) and motorized (Tru-Cut, Cal Trimmer, ATCO, Toro, John Deere, Jacobsen and Bunton) greens mowers are available.
- **Fertilization** – Fertilize creeping bentgrass putting greens with 0.5 lb nitrogen per 1,000 sq ft on May 1 and June 1 with slow-release N. Fertilize with 1.0 lb N per 1,000 sq ft on September 15 with slow-release N and on November 15 with quick-release nitrogen such as urea. Use fertilizers with small granules for best results and for a more uniform fertilization. Lighter, more frequent applications of foliar nutrition could also be used. Fertilize bermudagrass putting greens with 0.25 lb N per 1,000 sq ft per week in April; 0.375-0.5 lb N per 1,000 sq ft per week in May; 0.25 lb N per 1,000 sq ft per week in June, July and August; and 0.125 lb N per 1,000 sq ft per week in September.

Synthetic Putting Greens

- Many good synthetic putting greens are also available for installation in backyards. These professional artificial putting greens are virtually maintenance-free and are often less expensive than establishing and maintaining a natural putting green. Synthetic greens may cost from \$25 to \$35 per square foot. Web sites to investigate if you are interested in this option include but are not limited to:
 - <http://www.allprogreens.com>
 - <http://www.advantagegolfgreens.com>
 - <http://www.synlawngolf.com>
- Alternatively, do-it-yourselfers can visit their local building supply store and attempt to make their own green for a cost of only about \$4 per square foot. **NOTE:** The quality of these putting

surfaces is not as good as the professional synthetic putting green surfaces due to difference in the carpeting material and installation quality. Edging, PVC pipe and bushing, sand, paver base material, synthetic turf carpet and landscape fabric anchors are some of the supplies you will need.

Costs

Below are the costs for an approximately 1,000 square foot backyard putting green:

- Greens mower (\$1,000 to \$5,000)
- Mower sharpening (\$100/year)
- Rootzone (\$500 to \$1,500)
- Cup (hole) cutter, cups and flagsticks (\$300)
- Fertilizer (\$75/year)
- Fungicide (\$150/year)
- Insecticide (\$50/year)
- Creeping bentgrass seed (\$50) or Tifdwarf, TifEagle or Miniverde sprigs (\$150 to \$300)
- Time (priceless)

Additional Sources

- *Turf Management for Golf Courses* by James Beard and the United States Golf Association (2002). John Wiley & Sons, Inc., Hoboken, NJ.

- Visit <<http://www.kinipela.ca/>> for useful images on the construction of putting greens.
- Consider hiring a local golf course superintendent as a consultant during the construction of your backyard putting green. You will likely also need their help in the future to help learn the best way to manage your putting green.
- Animation on putting surfaces
<http://www.usga.org/turf/articles/video/great_putting_green.html>
- Animation on putting green irrigation
<http://www.usga.org/turf/articles/video/watering_healthy_turf.html>
- Animation on putting green aerification
<http://www.usga.org/turf/articles/video/aerate_greens.html>

Additional Information

Additional fact sheets are available at <<http://www.uaex.uada.edu/>>.

Additional information about turfgrass management is available at <<http://turf.uark.edu/>>.

The information given herein is for educational purposes only. Reference to products and turfgrass cultivars is made with the understanding that no discrimination is intended nor endorsement by the University of Arkansas Division of Agriculture Cooperative Extension Service.

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