

ATHLETIC FIELD CARE

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Good performance by players includes three field requirements:

1. Surface water must not accumulate so that
2. Soil surface may stay smooth and stable, and
3. It is nice to have good turf for safety and appearance.

Athletic turf needs to be the best possible. The three maintenance programs below expand to match budgets, supplies and technology. Timing is of most importance for growth responses of nature required time. Be early rather than late in procedures. Each program starts before player suits out and fall practice starts.

ECONOMY

- A. Fertilize in early fall (about August 10 in Indianapolis). Use 50 pounds actual nitrogen on field or 100 pounds inside tract oval.
Example: 45-0-0 at 100-200 pounds.
16-4-3 at 300-500 pounds.
- B. Start Watering if at all possible - as needed. Consider traveling types with automatic cutoff, such as larger turf types with 400-foot cord, and 200-foot of 1-inch plastic hose (more efficient), or the smaller lawn types with 100-foot tape and 3/4-inch hose (less expensive).
- C. Mow often at 2 inches high. As high as practical rather than as low as possible. Keep more leaf for more wear and cushion, and new energy within plants.
- D. Overseed lightly before each home game. Spread 5 pounds with Cyclone seeder over thin worn areas. Let cleats push the seed into soil.
- E. Fertilize again in mid-season--to force growth as the soil cools.
- F. See improved.
- G. Fertilize in late winter or early spring (by April 1 in Indianapolis) to force grass growth early.
- H. Kill broadleaf weeds and knotweed before they compete with turf (before June 15) use 2,4-D and decamba mixed. Follow label instructions.
- I. Mow often but HIGH all summer. This favors deeper roots and builds reserves of energy in rhizomes.
- J. Desired. See Improved.
- K. Spread wear. Save center of field. Extend and mark extra 5 yard lines wherever possible for optional team and band practice.

Parks, baseball fields, playgrounds and many use areas have similar needs. Adjust these ideas to your needs.

IMPROVED CARE PROGRAM

Increase values of Economy Program by:

- A. Use turf type fertilizer high in N, low P, medium K, (examples, 16-4-8, 18-5-9 with slow release nitrogens; apply 2-3 pounds N for each 1,000 square feet in mid-August.
- B. Until August 15 water only when wilt starts to show. If in doubt don't water. After August 15 water lighter and more frequently as needed for surface play.
- C. Mow 2 inches all summer; then 1.5 inches after first home game.
- D. Overseed before every home game. Consider using only newer, more disease resistant varieties of bluegrasses (Sodco, Fylking, Pennstar, etc.).
- E. Fertilize mid-fall to force growth.
- F. Immediately after play ends mulch thin areas with 1 ton crushed corncobs or organics, which, as it decomposes, favors soil aggregation and separation. Add extra fertilizer next year to offset decomposition.
- G. Fertilize lightly with a soluble nitrogen source to force growth in early spring.
- H. Prevent crabgrass, etc. Apply pre-emergence (April 1 - May 1). Can be used mixed with fertilizer. Mow twice in spring before applying pre-emerge. Kill broadleaf weeds and knotweed as needed.
- I. Mow frequently and HIGH.
- J. Intensely cultivate once in mid-summer. This loosens, reduces compaction, buries crowns and aids in leveling. (Consider using rental machines from supply houses or purchase). Go over repeatedly (Greensaire twice, aerifiers three to six times) in one day. Then shred cores, drag, roll, smooth and water as needed.
- K. Extend yard lines to fence for maximum practice areas. Use center for pass patterns only. Minimize practice on the field. Mark off 5 yard lines in other turf areas for band practice and wet weather use.

BEST CARE PROGRAM

Consider all points in Economy and Improved, plus

- A. Build up levels of N, P, K by repeated use of slow release fertilizers. Take composite 0-2 inches deep soil samples for test. Use lime and gypsum only if needed.
- B. Install triangular spaced, automatic pop-up padded head irrigation. (Get advice from reliable irrigation suppliers. Consider 3 rows of full circle, or 4 rows including part circles on edges.) Use only as needed.
- C. Mow frequently. Vertical cut and selectively thin, particularly at the edges of field where thatch accumulates. Combine with J.

- D. Plug repair any divots after each game. Overseed before wet games with 10 lbs. seed. Consider resodding to newer varieties.
- E. Keep nutrient reserves high in soil.
- F. Spread clear plastic sheeting (4 or 6 mil) with holes (punched by aerifier or golf shoes) to conserve heat, hold moisture and reduce freezing. Do not keep solid field covers on any more than necessary as this weakens turf rapidly.
- G. &
- H. Same as Improved.
- I. Mow frequently. Spray for leafspot disease control (4 times per year) as wet, humid weather dictates, See leaflets on disease, BP-7-1, 2, 3, 4.
- J. See Improved, plus deep power slice with slope from sideline to sideline once each year. Apply pre-mixed topdressing material (sand 50 percent, fine calcined aggregates 25 percent, crushed corncobs or/and peat 25 percent) after last game, then aerify and loosen.
- K. Make all of practice areas as long 5 yard lines. Use shorter cleats, 1/2 inch or less, for practice. They are safer, and they conserve the turf.
- L. Dress up field by spraying damaged or worn areas with colorants if needed.

Soil warming via burying electric cable, 12-24 inches center, 6-inches deep, and vented clear plastic covers (holes every 2-inches) can further protect turf and provide some climate control.

Sod, where used, should be grown on mineral soil (much is unacceptable for athletic turf areas). Cut as thin as practical: 3/4-inch is standard. Lay pieces offset and forced against each other.

ASSURE ADEQUATE DRAINAGE VIA EITHER -

a. Vertical trenches

1. Make narrow 2-3-inch trenches. Reset on rental utility trenchers. Go 12-24 inches deep diagonally across slopes. Five yards apart are suggested. Extend beyond sidelines to other drains, and criss-cross in center of field as desired.
2. Place 2-inch slitted, plastic drain pipe, (Cor-flow or equal in 250-foot rolls) into trench. Backfill with fine gravel or coarse sand. Cap last 3-inches to overflow with washed medium sand.
3. First trenching should be above and over any existing tile. Then go between these as desired.
4. Continue to add trenches until field is well drained.

b. Vertical slits

Any 3-10-inch deep narrow openings backfilled with calcined aggregates can aid in faster absorption of excess water.

1. Use shovel in early spring, pry open, slit in soil, overfill with calcined aggregates (Surface, Terra-green, LuSoil, Dialoam, etc.). Again pry open 4-10-inches deep; again overfill. Continue program in wet spots as needed.
2. Consider tractor mounted sharp blade pulled through wet areas; then backfill immediately to overflow as in No. 1.
3. Make holes as deep and close as desired and backfill to overflow; can improve wet spots.

c. Verticle grooves

Revolving blades on power machines desired for vertical slicing (down to 3-inches deep) are available as rentals or purchase. Go from sideline to sideline (with slope). Spread 5 tons calcined aggregates or sandy topmix onto surface; then drag over areas. Repeat annually. Water will follow slits toward sidelines.

d. Cultivate once or twice a year

including intensely in mid-summer. See Improved and Best programs.

e. Improve surface smoothness at end of season in fall.

- a. Deliver and spread sandy topsoil as needed to level.
- b. Then harrow or drag until contour is smooth.
- c. Then spread seed and fertilizer, and amendments.
- d. Use cultivating machines (aerifiers, aero-blades, etc.) to punch through, loosen and mix.

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