VADEMECUM – MAIN SETTINGS

January 2026

Model A,N and F

IC GREEN

HIGH PERFORMANCE ROBOTICS

Maintenance Calendar for Sports Turf

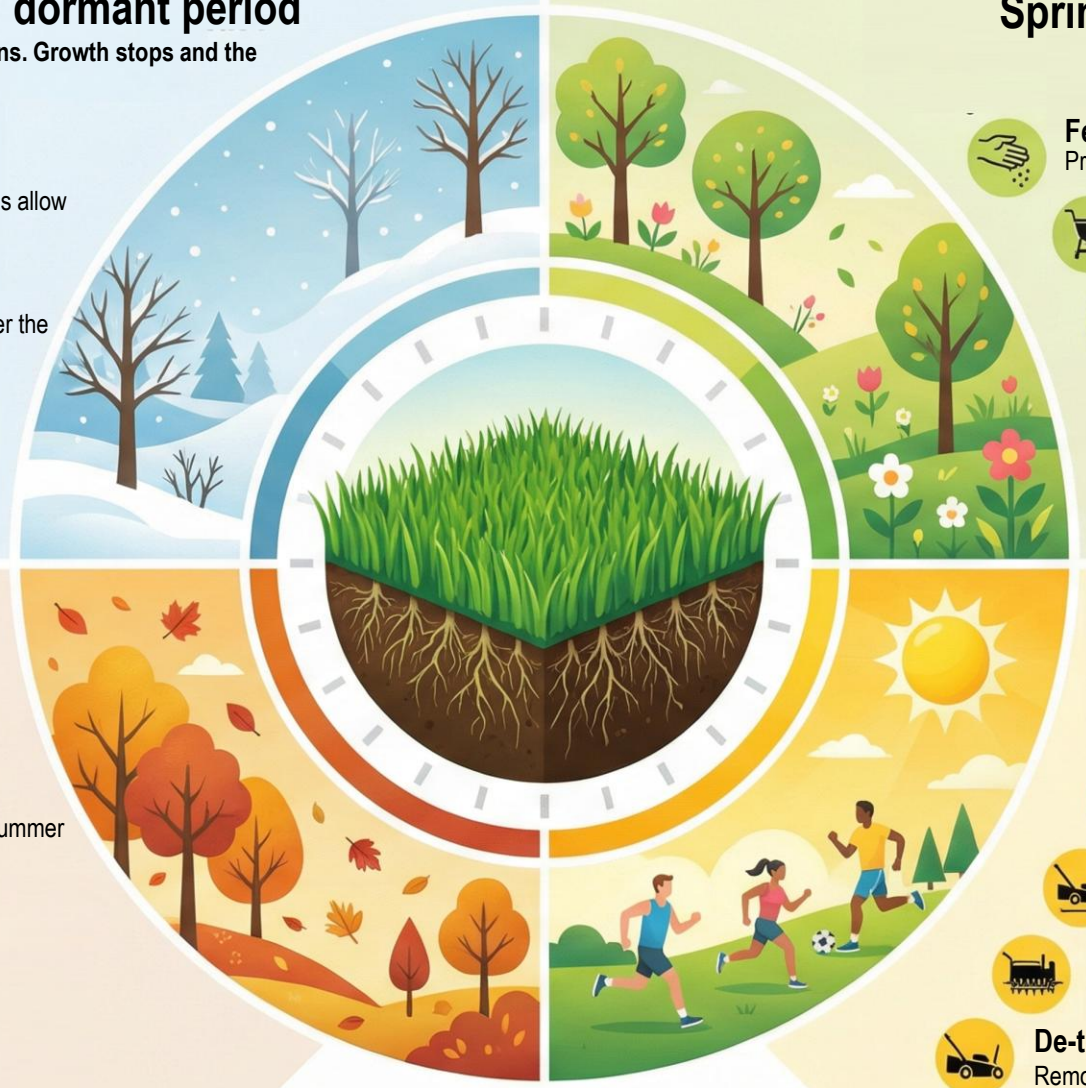
Winter (December – February): dormant period

Dormant period of the turf, ideal for heavy soil operations. Growth stops and the focus is on preparing the pitch

Mowing (reduced or stopped)
Only mow when necessary and when conditions allow

Annual decompaction
Correct soil compaction that has developed over the year

Rest period for the turf
Limit foot traffic and mechanical stress on the pitch



Spring (March – May): turf awakening

Prepare, nourish, and thicken the turf for the upcoming season.
Restore it after winter and get it ready for intensive use

Fertilization
Provide nutrients for vigorous growth

Overseeding(15g / m²)
Thicken the turf and fill in sparse areas

Aeration /Scarification
Improve oxygenation and remove thatch

Start of mowing
Mow regularly to stimulate turf growth

Weed control: 1 to 4 times per month
Start operations in April-May

Autumn (Sept. – Nov.): preparation for winter

Strengthening before winter dormancy. Key period for making the lawn more resistant during the cold months.

Overseeding (up to 40g/m²)
Sustained application to densify and repair after summer

Fertilization
Autumn fertiliser for rooting and cold resistance

Aeration /Scarification
Essential for preparing the soil for winter

De-thatching
Remove thatch to limit fungal diseases in winter

Weed control : 1 to 4 times/month
Operations to be continued throughout October

Summer (June – August):

Counteract heat and intensive use.
Limit stress during the hottest months

Watering (depending on weather)
Avoid drying out in hot weather

High mowing (> 5 cms)
To protect the roots from the sun and retain moisture

Aeration /Scarification
Continue aeration to preserve soil structure

De-thatching (June)
Remove thatch to avoid stunting growth.

Weed control : 1 to 4 times per month
Continue operations at regular intervals.

Important notes

Always scarify/de-thatch before using Sportee.
This step is essential for optimal results.

Observed vegetation cover: what decision should be made?

Decision support for the maintenance and renovation of a sports turf field

		Decision to be made	Sportee
1	> 80–85 % living grass	**Routine maintenance:** mowing, fertilization, light aeration, localized topdressing.	**Yes —** suitable
2	70–80 %	**Preventive overseeding recommended,** especially in play areas: goals, central axis, sidelines, warm-up areas.	**Yes —** recommended
3	50–70 %	**Regeneration / partial renovation to be scheduled:** the field is beginning to lose its playing qualities and its recovery capacity.	**Yes —** relevant down to 50 %
4	< 50 %, or very uneven/compacted field	**Major regeneration, or even complete renovation** if the soil is also degraded.	**No —** below 50 %, insufficient on its own
5	< 30 % healthy surface	**Complete replacement often becomes more relevant** than simple overseeding.	**No —** not for complete replacement

SPORTS FIELD REGENERATION: ESSENTIAL SETTINGS

1. Diagnosis and Strategy
Timing is everything !

< 20%	Regeneration +/- intensive
20 - 40%	Regeneration +/- intensive
40 - 60%	Intensive regeneration
> 60%	Scalping

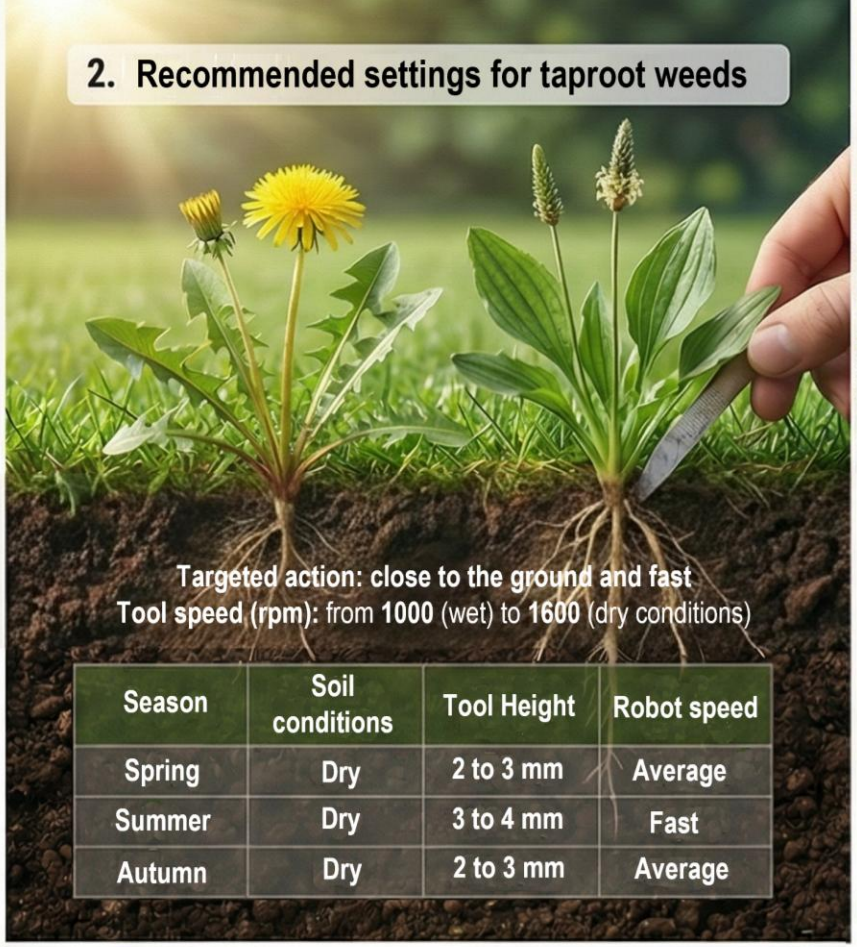
The strategy depends on the level of infestation

SPRING
April (after the frosts)
Intensive & mandatory

SUMMER
Early July
Recommended

AUTUMN
Early September
Intensive & mandatory

2. Recommended settings for taproot weeds



Targeted action: close to the ground and fast
Tool speed (rpm): from **1000** (wet) to **1600** (dry conditions)

Season	Soil conditions	Tool Height	Robot speed
Spring	Dry	2 to 3 mm	Average
Summer	Dry	3 to 4 mm	Fast
Autumn	Dry	2 to 3 mm	Average

3. Settings for other weeds

SPRING
→ 3 to 4 mm
→ 1000 (wet) to 1400 rpm (dry)
→ Robot speed : average to fast

SUMMER
→ 3 to 4+ mm
→ 1000 (wet) to 1400 rpm (dry)
→ Robot speed : fast

AUTUMN
→ 3 to 4+ mm
→ 1000 (wet) to 1400 rpm (dry)
→ Robot speed : average to fast

4. Key recommendation

The Next Step : overseeding

Overseeding rate:
Spring / Autumn: 10–15 g/m²
Summer: 10 g/m²

WARNING: always adjust according to the field
The settings provided are for guidance only and must be adjusted and validated according to the specific conditions of the field being treated

Key Settings for Sports Field Maintenance

Quick Reference Guide for Adjusting Turf Maintenance Equipment Based on Weed Type and Soil Moisture

Management of Taproot Weeds (Dandelion, Plantain, Thistle, etc.)

Characteristic: deep primary root. The treatment aims to weaken the taproot without damaging the turf

Robot Settings for Taproot Weeds

Soil condition	Tool Height (mm)	Tool Speed (rpm)	Forward Speed
Dry	3 to 4	1200 - 1400	Fast
Normal	3 to 4	1200 - 1300	Fast
Wet	4 to 5	1000 - 1200	Fast

Management of Other Weed Types (Clover, Crabgrass, Poa annua, etc.)

Characteristic: diffuse or creeping root system.
Objective: disrupt surface growth to favor the turf.

Robot Settings for other Weeds

Soil Condition	Tool Height (mm)	Tool Speed (rpm)	Forward Speed
Dry	4 to 5	1200 - 1500	Fast
Normal	4 to 5	1200 - 1400	Fast
Wet	> 5	1000 - 1200	Fast

Key Principles: Essential Adaptation

These settings are indicative; on-site observation and adjustment are essential for optimal results

Mowing height, grass species, weather, thatch presence, etc., strongly influence performance

Adjustment for Synthetic Surfaces

Brush position:

Midway on the carriage for all infills except cork and olive pits (end of carriage) and sand (front of carriage)

Frequency of use:

Twice a month or after 100 hours of use

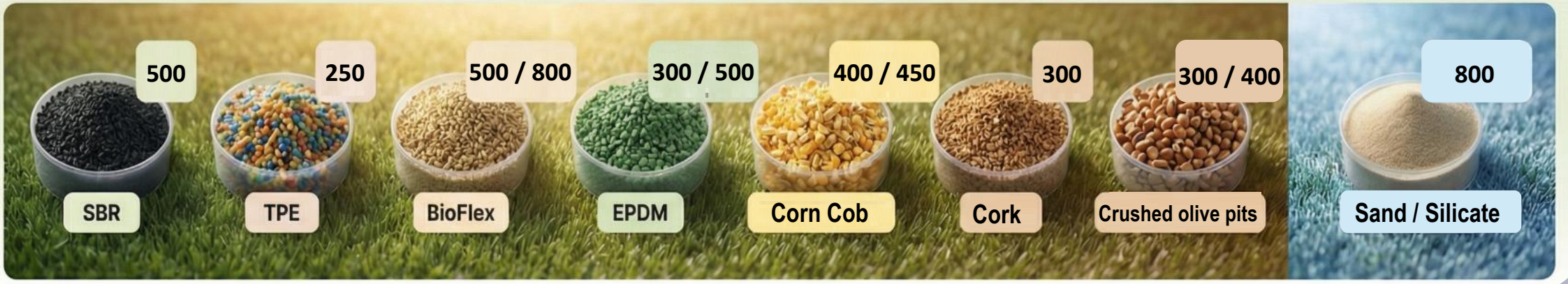
Tool depth:

Between 4 and 8 mm, depending on the density and weight of the infill

⚠ **IMPORTANT: the recommended values are for guidance only. Each operation must be adapted to the actual conditions encountered on the pitch**

Tool speed depending on the type of infill

Unit: revolutions per minute (rpm)



In wet weather

Increase speed by 50 to 100 rpm

In hot weather

Decrease speed by 50 to 100 rpm

In cold weather

Increase speed by 100 to 200 rpm

REGENERATION

Seasons	Spring	Summer	Autumn
Preferred period	April after the end of frosts	Early July	Early September
Recommendations	High and mandatory	Recommended	High and mandatory
Infestation level and field management strategy	A field may be colonized by one or several weed species. These recommendations must be adapted to the weeds encountered. Taproot weeds require working close to the surface with a higher tool speed.		
< 20%	Adapt regeneration to the dominant weeds		
20 to 40%	Regeneration: moderate to strong		
40 to 60%	Intensive regeneration	Regeneration: moderate to strong	Intensive regeneration
> 60%	Scalping	Regeneration: moderate to strong	Intensive regeneration

If most are taproot weeds

Plantain, thistle, dock (Rumex), dandelion, daisy, other weeds... are treated as taproot weeds	Intensive regeneration	Regeneration: moderate to strong	Intensive regeneration
Dry			
Tool height settings (mm)	2 to 3 mm	3 to 4 mm	2 to 3 mm
Tool speed (rpm)		1400/1600	
Robot speed	Medium	Fast	Medium
Normal			
Tool height settings (mm)		3 to 4 mm	
Tool speed (rpm)		1200/1400	
Robot speed	Medium	Fast	Medium
Wet			
Tool height settings (mm)		4 mm and above	
Tool speed (rpm)		1000/1200	
Robot speed		Fast	

If most are other weeds

Example: clover, crabgrass, Poa annua, etc.	Intensive regeneration	Regeneration: moderate to strong	Regeneration: moderate to strong
Dry			
Tool height settings (mm)	3 to 4 mm	3 to 4 mm	3 to 4 mm
Tool speed (rpm)	1200/1400	1200/1400	1200/1400
Robot speed	Medium	Fast	Medium
Normal			
Tool height settings (mm)		3 to 4 mm	
Tool speed (rpm)		1200/1400	
Robot speed		Fast	
Wet			
Tool height settings (mm)		> 4 mm	
Tool speed (rpm)		1000/1200	
Robot speed		Fast	
Next step	Overseeding: 10–15 g/m²	Summer overseeding: 10 g/m²	Winter overseeding: 10–15 g/m²

The concept of disc adjustment, which determines a more or less pronounced intensity of action (referred to as aggressiveness by some operators and as effectiveness by others), is inherently linked to each user's practices and judgement. The settings shown are provided for guidance only and must be adjusted and validated based on the specific conditions of the field to be treated, which may differ from the recommendations given.

Maintenance

Seasons	Spring	Summer	Autumn
Preferred period	May	August	October
Weeds – general recommendations	Post-regeneration maintenance	Post-regeneration maintenance	possibly very light work
Poa annua specifics	Optional Poa program Discs set to 5 mm / tool rotation at 1200–1400 rpm / fast speed	Optional Poa program Discs set to 5 mm / tool rotation at 1200–1400 rpm / fast speed	
Infestation level and field management strategy	If the protocol is followed, intensive regeneration with overseeding has been carried out, and the weed level **should not exceed 40%**		
< 20% 20 to 40%	Medium maintenance Heavy maintenance	Medium maintenance Heavy maintenance	Optional if needed, check the level before winter

If most are taproot weeds			
Plantain, thistle, dock (Rumex), dandelion, daisy, other weeds... are treated as taproot weeds	Heavy maintenance	Heavy maintenance	Adjustable setting
Dry			
Tool height settings (mm)	3 to 4 mm		
Tool speed (rpm)	1200/1400		
Robot speed	Fast		
Normal			
Tool height settings (mm)	3 to 4 mm		
Tool speed (rpm)	1200/1300		
Robot speed	Fast		
Wet			
Tool height settings (mm)	4 to 5 mm		
Tool speed (rpm)	1000/1200		
Robot speed	Fast		

Other weed types			
Examples: clover, crabgrass, Poa annua, etc.	Medium maintenance	Medium maintenance	Optional
Dry			
Tool height settings (mm)	4 to 5 mm		
Tool speed (rpm)	1200/1500		
Robot speed	Fast		
Normal			
Tool height settings (mm)	4 to 5 mm		
Tool speed (rpm)	1200/1400		
Robot speed	Fast		
Wet			
Tool height settings (mm)	> 5 mm		
Tool speed (rpm)	1000/1200		
Robot speed	Fast		
Next step	Irrigation: amend and fertilize the soil appropriately	Irrigation: amend and fertilize the soil appropriately	Irrigation: amend and fertilize the soil appropriately

The concept of disc adjustment, which determines a more or less pronounced intensity of action (referred to as aggressiveness by some operators and as effectiveness by others), is inherently linked to each user's practices and judgement. The settings shown are provided for guidance only and must be adjusted and validated based on the specific conditions of the field to be treated, which may differ from the recommendations given.

Synthetic turf maintenance: decompaction and re-leveling of the infill by brushing				
Recommendation: At least twice a month or after 100 h	**Spring**	**Summer**	**Autumn**	**Winter**
	Synthetic rubber origin			
SBR – Styrene Butadiene Rubber	500	500	500	500
Encapsulated SBR / SBR coated	500	500	500	500
TPE / TPO – Thermoplastic Elastomer	250	250	250	250
BioFlex – depending on density	500/800	500/800	500/800	500/800
Re-leveling brush position	Mid-trolley	Mid-trolley	Mid-trolley	Mid-trolley
	Pure synthetic origin			
EPDM – Ethylene Propylene Diene Monomer	300/350	300/350	300/350	300/350
Re-leveling brush position	Mid-trolley	Mid-trolley	Mid-trolley	Mid-trolley
	Bio-based plant origin			
Corn cob	400/450	400/450	400/450	400/450
Re-leveling brush position	Mid-trolley	Mid-trolley	Mid-trolley	Mid-trolley
Cork	300	300	300	300
Re-leveling brush position	At the end of the trolley	At the end of the trolley	At the end of the trolley	Mid-trolley
Olive pits	300/400	300/400	300/400	300/400
Re-leveling brush position	At the end of the trolley	At the end of the trolley	Mid-trolley	Mid-trolley
	Mineral-based			
Sand and silica	800	800	800	800
Re-leveling brush position	At the front of the trolley	At the front of the trolley	At the front of the trolley	At the front of the trolley

In rainy weather, test tool rotation and possibly increase by 50 to 100 rpm; adjust the brush setting on the trolley, which may differ
In very cold weather, increase by 100 to 200 rpm; adjust the brush setting on the trolley, which may differ
In very hot weather, possibly reduce by 50 to 100 rpm depending on the weight of the infill; adjust the brush setting on the trolley, which may differ