

Turf Maintenance Guide

Western Australia



plus Village Green's competitive advantages

www.villagegreenturf.com.au

Why Village Green?



Village Green is a proven top performer across high use sports fields, public open spaces, high traffic areas and backyards. Village Green takes the guess work out of specifying when you need a turf with outstanding advantages. Here's why choosing Village Green is the answer.

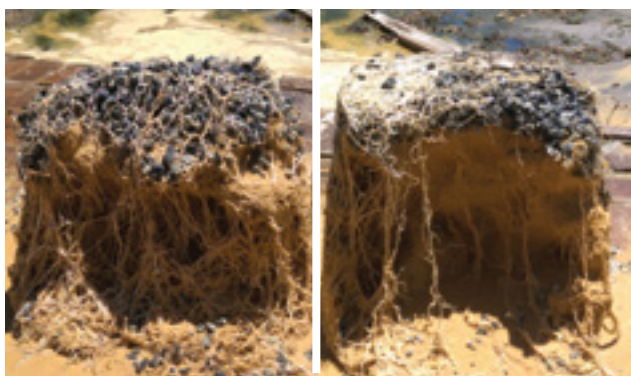


Village Green (L) versus common kikuyu (R)

Superior density more shoots per square metre

Advantages include:

- Increased wear tolerance.
- Quicker recovery after wear.
- Ability to maintain full cover even under severe drought or low nutrient conditions.
- Less weed invasion.
- Ability to handle very low mowing heights.
- Research indicates Village Green is 26% denser than common kikuyu.



Village Green (L) versus common kikuyu (R)

Efficient root system more roots per square metre

Advantages include:

- Increased efficiency of water and nutrient uptake.
- Better drought tolerance.
- Increased surface stability.
- Reduced risk of nutrient leaching.
- Research indicates Village Green has double the root volume versus common kikuyu.





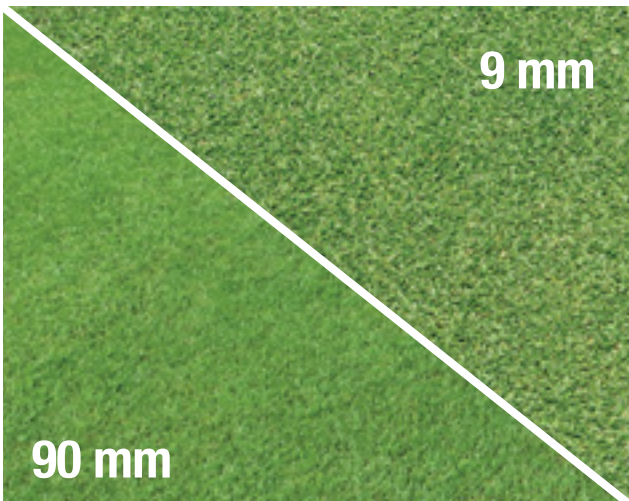
Village Green (L) versus common kikuyu (R)

Superior appearance compact growth habit and dark green colour



Advantages include:

- Better presented surfaces.
- Less need for fertiliser.
- Good first impression for users of the surface.
- Greater resistance to weeds.



Outstanding versatility



Advantages include:

- Mowing heights from 9 mm to 90 mm.
- A wide range of uses from hockey to racetracks.
- Use in low maintenance environments e.g. community ovals; through to high profile sports fields.
- Used in environmental stabilisation control.



Village Green (L) greener longer in winter versus common kikuyu (R)

Superior winter activity



Advantages include:

- Less need for over sowing in cold regions.
 - Better turf performance during winter.
 - Less need for re-turfing at end of winter.
 - Can be grown in colder regions.
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WA Turf Maintenance Guide

Easy to follow information and guidance on how to achieve the optimum performance from Village Green turf, year after year. With site specific site maintenance, Village Green turf will remain green and active, and deliver a high performing, attractive surface throughout the year in the southern Western Australia region.



Irrigation

General watering guide

As a guide, Village Green turf should be irrigated using the following irrigation schedule during the warmer months from October to April.

Weekly irrigation requirements (mm)							
	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Active	25	35	40	40	40	35	10
Passive	16	22	27	27	27	22	7

To achieve an optimum surface, apply a wetting agent at least twice during the warmer months at a rate of 50 L/ha to avoid dry patch.

Ensure the irrigation system is working properly and delivers an even coverage of water. Poor sprinkler maintenance leads to patchy turf.

Use a corer or a handheld moisture probe to test the soil moisture levels. Ideally, install a soil moisture probe to enable continuous soil moisture monitoring in real time.

Keep the soil moist throughout the irrigation season.



Under the same conditions the results of UWA research showing the benefits of applying a wetting agent (R)



Catch cups can be used to determine precipitation rates and uniformity of irrigation systems



Mowing

Frequency

Mow more frequently if required. It is important not to allow excessive growth. Regular low mowing is beneficial for reducing the risk of thatch development.

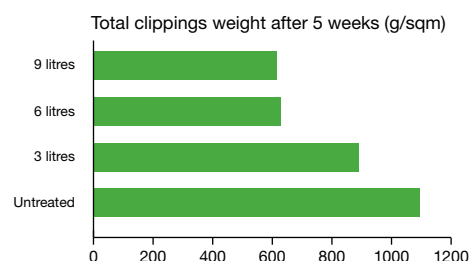
As a rule, lower mowing heights require greater frequency of mowing and result in a denser sward.



Turf height gauge

To reduce mowing frequency, apply a growth retardant such as Clipless or Primo at 2.5–5 L/ha in early December, repeat in February if required (see results from trial below).

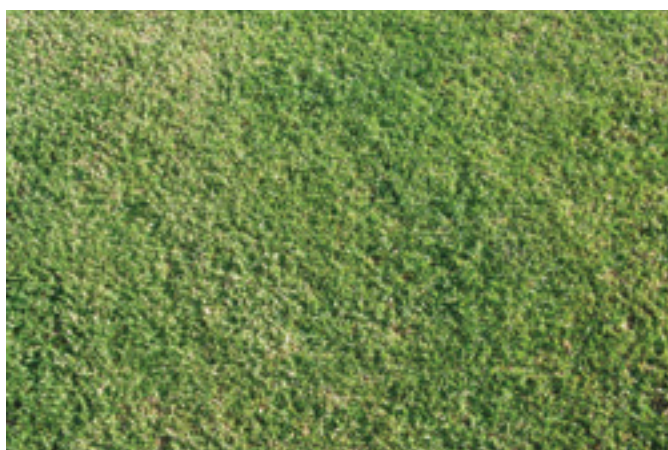
Over the 5 week trial period the two highest rates of Clipless resulted in a 43% reduction in the total amount of clippings.



Height

Recommended mowing heights for Village Green turf	
Cricket	10–15 mm
AFL Football/Soccer	20–25 mm
Recreation areas	20–30 mm
Rugby Union/League	25–40 mm
Horse racing	80–100 mm

Village Green turf (and kikuyu in general), mown at heights above 30 mm can become stemmy and prone to scalping. Frequent and lower mowing on sports fields and high profile public spaces helps avoid this.



Rugby fields and racetracks require a longer sward, and the turf can be allowed to grow up to heights of 40–100 mm. However, at the end of the season it is important the turf is renovated and mown down to soil level. Village Green turf will recover quickly from renovation.

Mower type

Using the correct mower can also impact turf quality and performance. A heavy deck rotary mower such as the Pegasus, is ideal for most situations. For a first-class finish where a tight, low mown surface is required (i.e. small ball sports) then a cylinder mower is recommended.



Under the same conditions UWA turf research shows the difference in mowing height with low mown at 10 mm (L) and mown at 50 mm (R)



Nutrition

Nitrogen

The most important nutrient for managing Village Green is nitrogen. Critical application times for nitrogen-based fertilisers are September/October and April/May.

The best way to determine if nitrogen is required is by leaf analysis. As a guide, maintain leaf levels between 2.0–2.5% during the warmer months (test in September) and above 3.0% during the cooler months (test in April). It is advised to seek professional advice on interpreting results.

Adhering to this regime will keep the turf actively growing and green all year round, even in areas prone to frost.

On newly established sites, nitrogen fertiliser should be applied more frequently at lighter rates, especially during winter and early spring.

Avoid applying excessive amounts of nitrogen during the warmer months unless the site is high-profile and frequent mowing is planned. Nitrogen promotes vigorous growth which leads to thatch build-up. On sporting fields, close monitoring of nitrogen, iron and manganese is required to maintain a dense and active growing surface.

Other nutrients

Decisions on nutrient type and rate of application should be based on leaf and soil analyses.



The effect of leaf nitrogen status at 1.5% (L) versus leaf nitrogen status at 3% (R) in winter



Response of iron and manganese foliar application (L) versus untreated (R)



Vertimowing



Coring



Sand topdressing

Renovation

Thatch build up and renovation needs can be reduced by regular low mowing and avoidance of excessive nitrogen applications. Adherence to a site specific maintenance schedule will assist in controlling turf during the rapid growth season. If renovation is required then it should occur during the warmer months.

Frequent mowing regime will provide an exceptional playing surface with minimal need for weed control and reduced renovation requirements.

Should thatch build up the following renovation measures should be undertaken.

1. Vertimow or scarify to remove surface thatch.
2. Mow to near ground level (10 mm).
3. If a mat layer is present, core to a 100 mm depth. Use hollow tynes in sandy soils and solid tynes for heavy soils.
4. Top dress turf with 5–10 mm sand and brush or run in. Ensure top dress material matches the original profile.

Improved winter performance

Village Green turf has a greater cold tolerance than other warm season grasses. To maximise the turf's colour and vigour, the following practices should take place in late autumn:

1. Mow to 15–20 mm.
2. Apply a layer of compost and sand at 50 cubic meters/ha.
 - A. If compost is unavailable, apply a nitrogen based fertiliser such as sulphate of ammonia.
 - B. Apply the same fertiliser again mid/late winter when not using compost.
3. Should frost damage occur mow low to remove the damaged leaf.



May



June



July

Topdressing with compost improves cold tolerance and promotes winter growth



WA Maintenance Calendar – active sports fields

	January	February	March	April	May	June	July	August	September	October	November	December	
Irrigation	40 mm/week	40 mm/week	35 mm/week	10 mm/week dependant on weather	Irrigate depending on weather	Irrigation can be used in winter on sports fields for watering in fertiliser and pesticides		Irrigate depending on weather	25 mm/week	35 mm/week	40 mm/week		
Mowing	Mow at least weekly			Mow 7–10 days depending on growth/use									Mow at least weekly
Soil and leaf analysis					Soil and leaf analysis to determine fertiliser programme for cooler months					Soil and leaf analysis to determine fertiliser programme for warmer months			
Application of fertilisers	Only apply nitrogen fertiliser if leaf tissue levels <2%. Ideally maintain nitrogen levels between 2.0–2.5% during warmer months				Apply fertilisers based on testing		Apply some additional nitrogen on high use ovals		Maintain nitrogen at 3.0% or greater during cooler months		Apply fertilisers based on testing		
Wetting agent	Apply wetting agent at 50L/ha												Apply wetting agent at 50 L/ha
Growth retardant (if required)			Apply growth retardant e.g. Primo 2.5–5 L/ha										Apply growth retardant e.g. Primo 2.5–5 L/ha
Weeds						Treat broadleaf weeds if required							
Renovation	Renovate if required												Renovate if required