

Maintenance Equipment in the Tropics: What is required to get great turf

Bv: Les Jeremiah Jr. CGCS



Personal Golf Experience

- 25 years experience in golf.
- 20 years experience in golf course management.
- Certified Golf Course Superintendent (CGCS) Class A member with the GCSAA.
- Graduate from University of Hawaii; WCC campus Turf, Agricultural, and Plant Landscaping programs.
- Graduate Ohio State University Golf Course Management on-line Program.
- Extensive experience with various turf types and various golf courses around Hawaii.

Greens and Tees Mowers

Walk behind mowers versus riding Tri-plex



Walk behind mowers

Pros:

- They are lighter resulting in less compaction.
- Less issues with “Tri-plex Ring” on the edges.
- Cheaper in cost to purchase.
- Aesthetically it leaves a more desired stripping affect on your turf.
- More maneuverable to use where green designs are tougher to maintain like on an island green, access to an area is limited, or where the mowing surface has more than normal undulations.
- Easier for maintenance and repairs.

Walk behind mowers

Cons:

- Usually will take 3–4 staff members a day to mow an 18–hole golf course facility usually to include the practice greens as well.
- May take longer to get between desired mowing areas if they are not towed.

Riding Tri-plex mowers

- Pros:
- They provide a faster alternative to walk mowing reducing your daily mowing time.
- Reduce the amount of required staff necessary for your daily mowing needs.
- Faster to mobilize between desired mowing areas.

Riding Tri-plex mowers

Cons:

- Substantially more expensive than a walk mowing unit. A costs analysis should be considered before doing this.
- Not as maneuverable to use where green or tee designs are tougher to maintain like on an island green, or where access to an area is limited, or where the mowing surface has more than normal undulations.
- More to deal with for maintenance and repairs. Reel adjustments, parts, oils, fluids, grease, etc.
- Leaves less to no striping affect after mowing depending on turfgrass type.

Attachments that assist with



Brush Attachments

Detachable turf brushes



Mowing frequencies for

Ideally for the best density of turf on green surfaces mowing should be on a daily basis for actively growing turf. Although this is ideal, I caution everyone to evaluate their own growth situations as mowing daily may not exactly work for each and every venue. Remember actively growing turf.

Mowing frequencies for Tees

Ideally for tees you should mow at least 3 times a week minimum on actively growing turf for good density on tees. For golf courses with limitations on labor, twice a week at a slightly higher height should suffice depending on turf type.

Regulating nutrients, irrigation, and incorporating growth regulation can also help to reduce mowing frequency.

Topdressing



Drop Top dresser types



Topdressing is necessary for these reasons:

- To improve ball roll and consistency.
- To help dilute thatch and organic material.
- Improve soil structure when soils need improvement. Please be sure to consult an accredited laboratory before selecting any type of topdressing material.
- Selecting an improper type of topdressing material can do more harm than good.
- Seek the advice from a qualified turf consultant.

Self Contained Rollers

Tri-plex rollers



Rolling Frequency

- Rolling can be done on a daily basis, every other basis, or just during high play days of the week.
- Rolling can also take the place of mowing when the turf needs a little time to recover.
- Always evaluate your turf conditions before committing to any rolling program.

Boom Sprayers

175 + gallons capacity



Boom Sprayer Uses

- Foliar feeding has become increasingly more popular due to the higher costs of granular fertilizer.
- Pesticide applications.
- Growth regulation applications.
- Iron applications.
- Wetting and soil surfactant applications.

Verti-cutting

Walking unit



More verti-cutting styles

Tri-plex units with interchangeable units



Verti-cutting reel unit



Verti-cutting timing

- Verti-cut turf during the season of growth. In Hawaii this is usually from early spring through mid-summer.
- Verti-cutting should not be done if the turf does not have the ability to regenerate or recuperate reasonably quick verti-cutting.
- Also please note that although verti-cutting is necessary, you will injure turf in the process. Supplemental fertilizer or pesticide may be

Vacuums for cleanup



Helpful Big Blowers



Aerifiers

Walk aerifiers



More types

Free rolling type

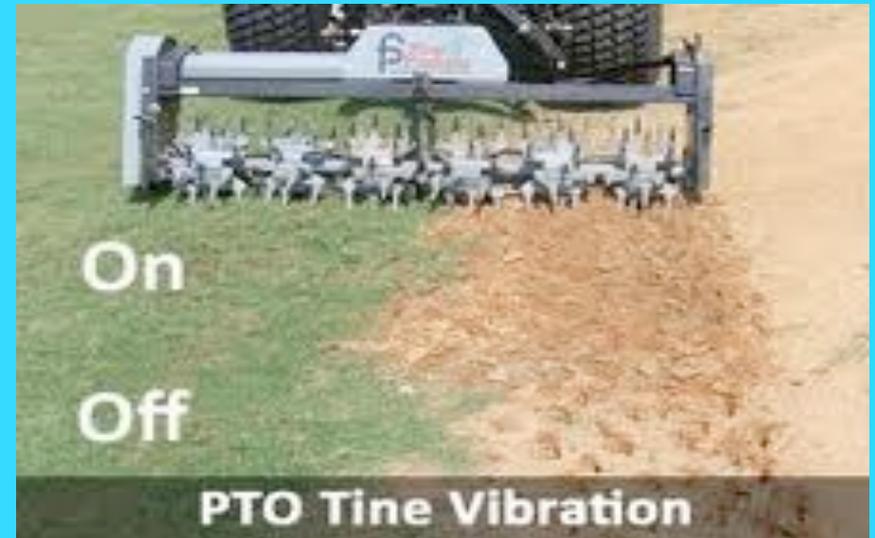


Deep Tine type



More types

Vibratory/Free Rolling type



Various Tine Types



Aeration cleanup

Core Processor



Aeration cleanup

Core Vacuum



Fairway Mowers



Fairway mowing frequency

- Typically fairways are mowed 3 times weekly. At minimum 2 times weekly. Some golf courses will mow 5–7 days a week for maximum quality.

Primary Rough Mowers

Rotary Types



More Rotary Types



More Primary Rough Units

With Articulation as well



Trim Rough Mowers

Rotary type



More Trim Rough Mowers

Flail type



Rough mowing frequency

- Roughs are typically mowed once or twice weekly.

Mechanical Sand Rakes



Heavy Duty Utility



Special Attachments

Lift



Questions?