

***Poa annua* Control**

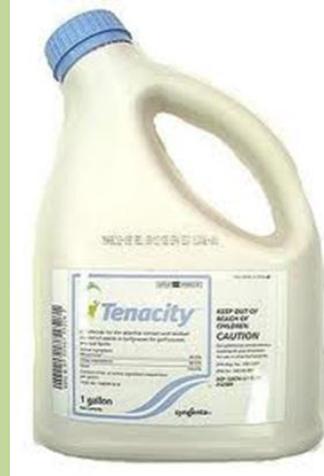
Herbicide Research Update

I: Multi (2 consecutive)-year Fall Tenacity plus Prograss program for selective post-emergence *Poa annua* suppression in Kentucky bluegrass fairways

**Northwest Turfgrass Conference
September 27, 2011**

**Charles Golob and William Johnston
Washington State University**

Tenacity



- Mesotrione
- Unique mode of action: pigment inhibitor.
- 46 broadleaf and grass weeds (i.e. bentgrass).
- 4 – 8 fl oz/A. Limit 16 fl oz/A/yr.
- Pre- and post-emergence (Fall) activity on *Poa annua*.

Prograss

- Ethofumesate
- Mode of action: inhibits cell division
- Pre- and post-emergence on *Poa annua*
- Fall applications (recommended)
 - 2-3 apps.
 - Up to 64 fl oz/A/app.



Rates

- **Tenacity 5 fl oz/A**
- **Tenacity 5 fl oz/A +
Prograss 32 fl oz/A**
- **Prograss 32 fl oz/A**
- **All treatments except Prograss alone
were tank mixed with NIS (Activator
90): 0.25% v/v**

Fall application dates

2009

- 3 dates 2 weeks apart:
–9/22, 10/7,
and 10/19.

2010

- 3 dates 2 weeks apart:
–9/16, 9/30, and
10/14.
- Barricade applied:
9/8 at 1 lb/A.

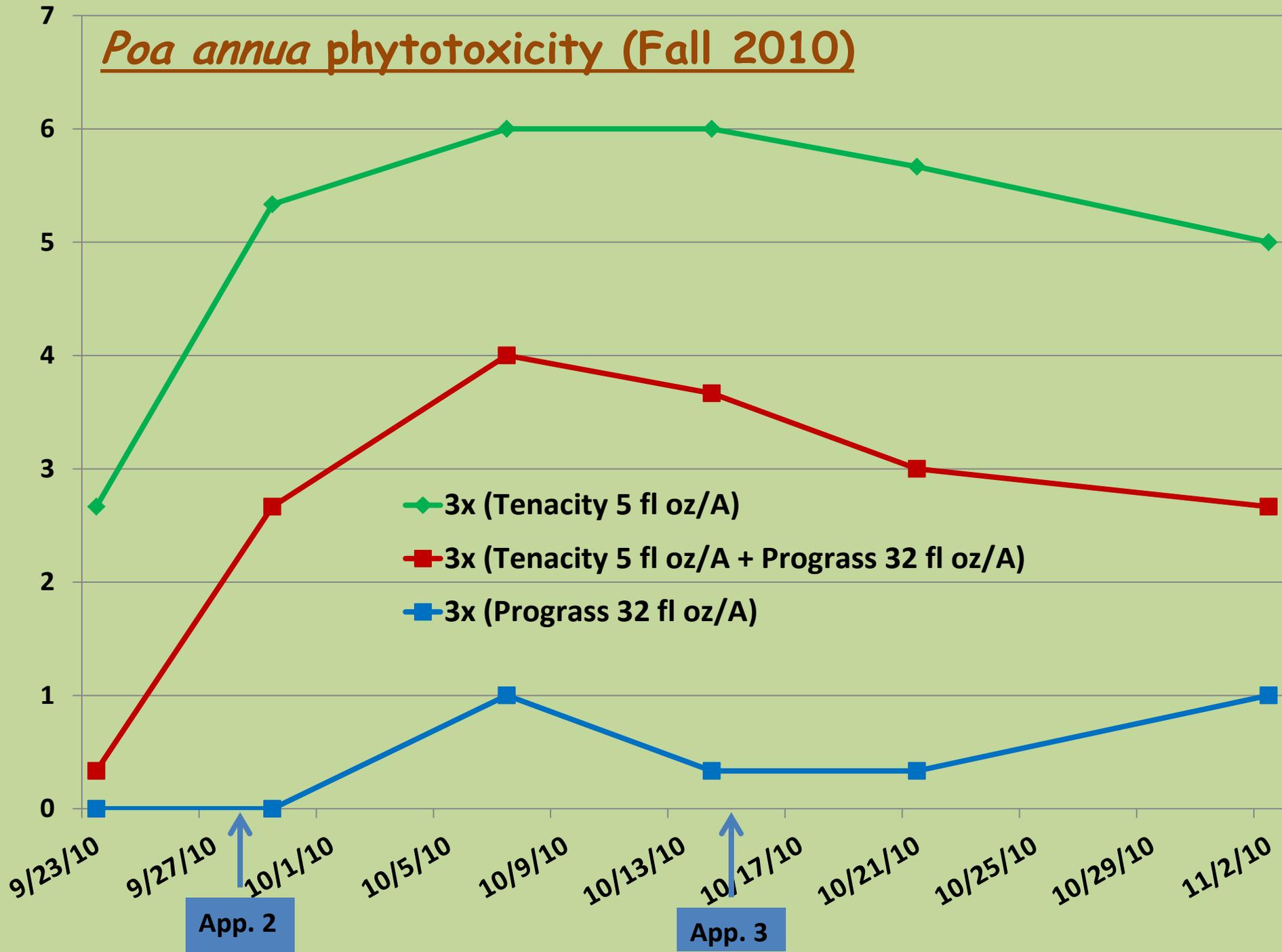
Location

- **#9 fairway Palouse Ridge Golf Club**
 - Kentucky bluegrass
 - Approx. 50% *Poa annua* in stand (Fall 2009)
 - Low % bentgrass and broadleaf weeds

DATA

- **Phytotoxicity (*Poa annua*)**
 - Rated 0-10; 10 = dead
- **% *Poa annua***
- **Turfgrass quality**
 - Rated 1-9; 9 = excellent.
- **No Kentucky bluegrass phytotoxicity noted**

Poa annua phytotoxicity (Fall 2010)



Poa annua phytotoxicity following 2nd app. (10/7/10)

CHECK

Prograss 32 fl oz/A

Tenacity 5 fl oz/A +
Prograss 32 fl oz/A

Velocity 2 oz/A

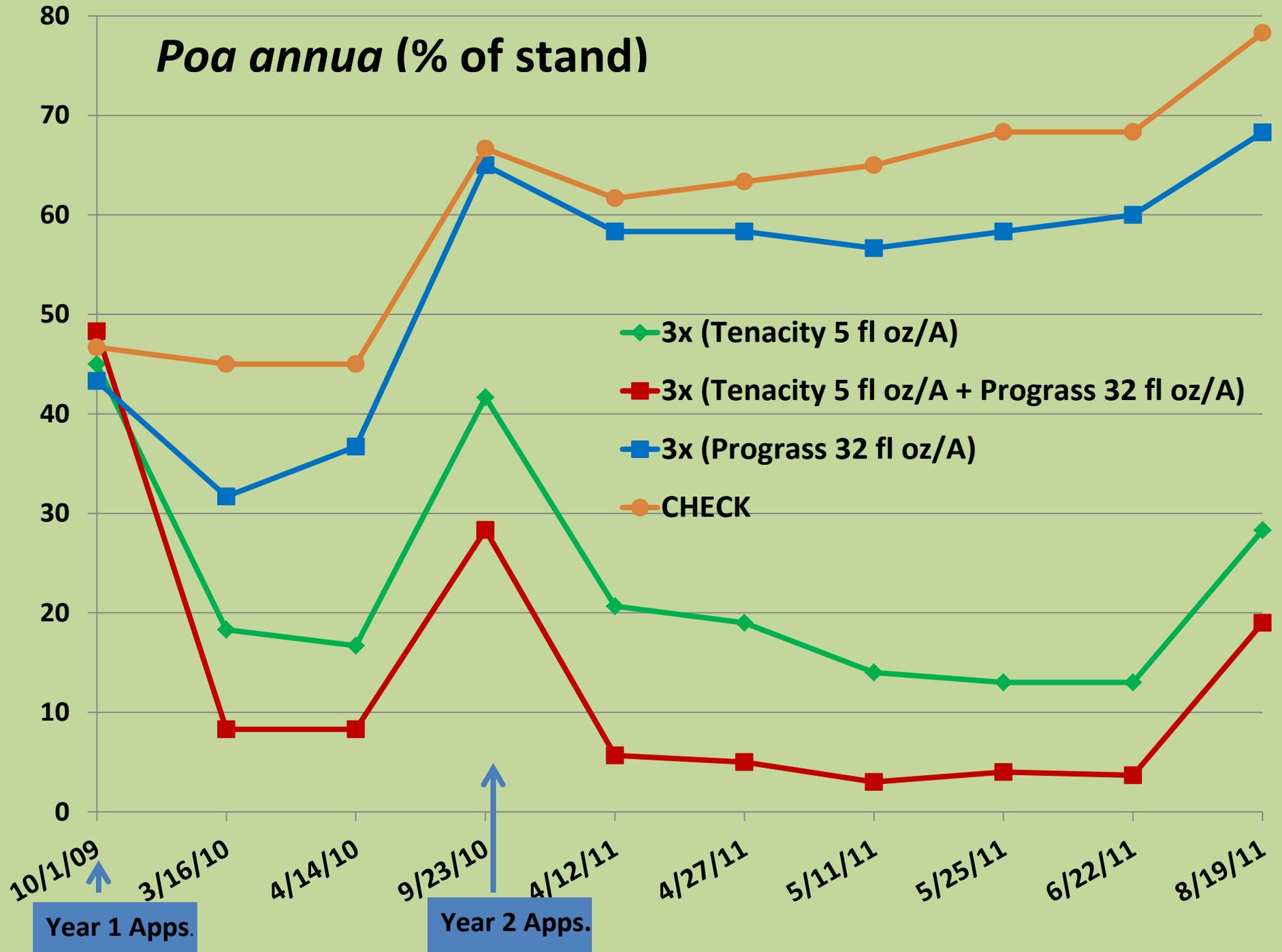
Tenacity 5 fl oz/A

Tenacity 5 fl oz/A +
Velocity 2 oz/A

Barricade applied at 1 lb/A on 9/8/10

PRGC 9 Fwy

Poa annua (% of stand)



***Poa annua* control**

PRGC #9 fairway
April 14, 2010



**Tenacity 5 fl oz/A +
+ Prograss 32 fl oz/A**

PRGC #9 fairway

April 14, 2010

Matted dead leaf tissue of annual bluegrass

3 Fall apps

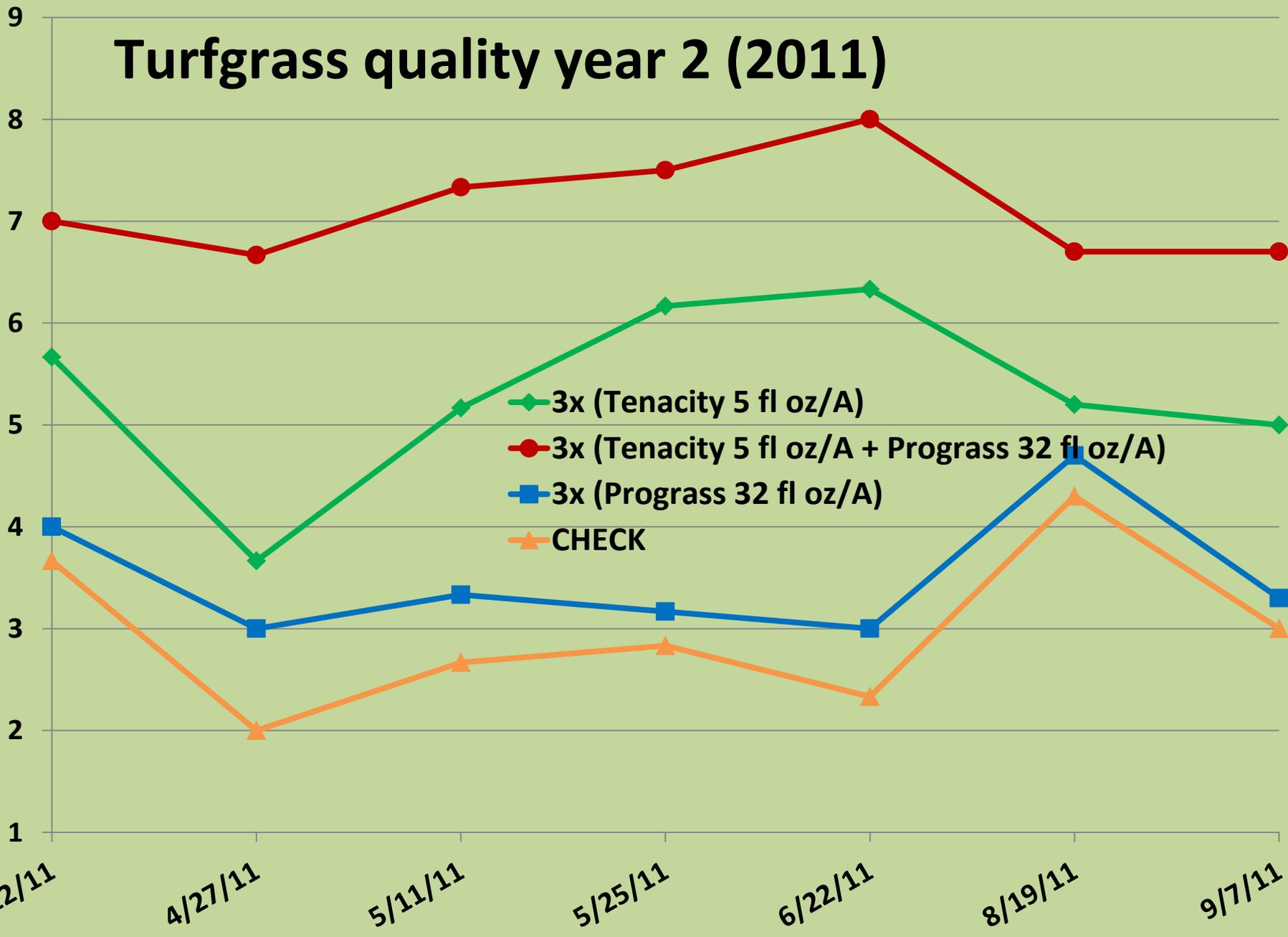
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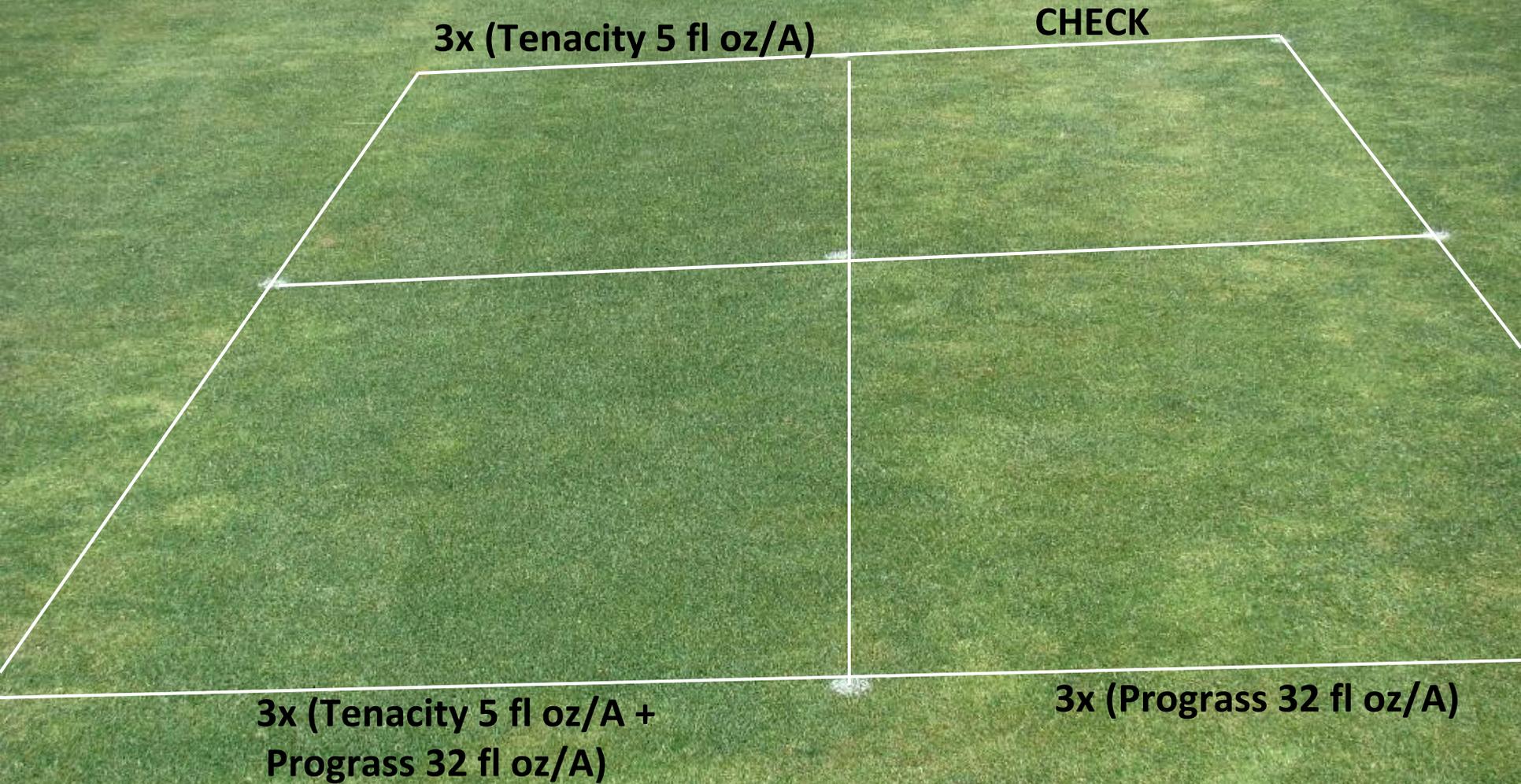


Turfgrass quality year 2 (2011)



Turfgrass quality year 2 (2011)

6/22/11



Conclusions

- *Poa annua* phytotoxicity (Fall only).
- Reduced *Poa annua* in fairway, but did not achieve complete *Poa annua* control following 2 consecutive years of Tenacity + Prograss Fall treatments.
- It appears that for this program to work continual Fall applications may be necessary to maintain lower levels of *Poa annua*.
- Improved turfgrass quality (especially color) throughout summer.
- Added benefit: broadleaf weeds and bentgrass controlled.

Acknowledgements

- **Palouse Ridge Golf Club at Washington State University**
- **Syngenta**

Questions?