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Tree Preservation Orders – A Brief Review

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The Status & Purpose of TPOs

A TPO is a legal instrument upon which a prosecution(s) can be brought –

It follows that it has to be accurate and to have been confirmed!

The purpose of a TPO is twofold:

1. To protect and preserve trees and the space they occupy in so far as this is reasonably practicable; and

2. To ensure the continuity of tree cover for future generations.

A TPO can be an opportunity for an LPA to secure new tree planting but this opportunity is not often exploited.

Town & Country Planning Act 1990

The System

LPAs have a statutory duty to create TPOs where it is in the interests of 'amenity' to do so by virtue of s197 of the Act;

s198 provides the powers to create and confirm TPOs and the process is governed by 'The TPO Regulations';

Government guidance is provided – formerly in 'The Blue Book' which has now been replaced with online guidance 'Tree Preservation Orders and trees in conservation areas: http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders/

To work on a protected tree an application has to be made to the LPA for permission – which is quite easy these days using 1-APP via the Planning Portal;

Town & Country Planning Act 1990

The System

An LPA can GRANT consent; grant consent with modification(s); grant consent with conditions; OR

REFUSE consent with reasons for refusal;

If consent is refused the applicant can APPEAL to the Secretary of State for Communities & Local Government, typically using the Fastrack option;

The decision of the Inspector appointed by the Secretary of State is final;

[Appeals can also be made against a variation or against conditions]

It all seems to be quite simple really!

Town & Country Planning Act 1990

The Act has been referred to as “The Arborists’ Employment Act” - Bill Kruidenier former Executive Director of the ISA;

The TPO system is an integral component of the work of LPA Tree Officers, Consulting Arborists and Contractors;

It has been around in more or less its current format since the 1947 Act although there was provision for TPOs before that;

It has gone through a number of iterations since 1947;

It was recently (2012) revised and updated;

It seems to be a logical and easily administered system;

So why do we regularly get it wrong?

Town & Country Planning Act 1991

WHY

Does the industry still make silly and avoidable mistakes?

Is the administration of the system prone to avoidable errors?

Is the main reason for failure of the UK/I version of the ISA Certified Arborist examination the Statutory Protection of Trees Domain?

This Domain is unique to the UK/I Certified Arborist Study Guide!

The Common Errors

Consultants/Contractors:

1. Submitting applications for removal simply to suit clients;
2. Justifying these applications with reasons that simply don't stand up to scrutiny;
3. Not checking if TPOs have been confirmed or not;
4. Continuously Referring to 'invalid' TPOs
5. Challenging the validity of confirmed TPOs.

Local Planning Authorities:

1. Failure to confirm TPOs;
2. Failure to update TPOs;
3. Creating new TPOs months after refusing consent for tree work in applications made on an unconfirmed TPO;
4. Issuing copies of TPOs without a note stating that they are now governed by the 2012 Regulations;
5. Mounting mischievous prosecutions;
6. Using TPOs as weapons against developers and the public.

Consultants / Contractors

The most common error from the private sector in my experience is supporting an application for consent to fell simply because the owner/ client doesn't like the tree.

An application was made to fell this pine tree simply because it shed needles onto a lawn;

The application was made by an Arboricultural Consultant who tried to argue that the tree was hazardous!

The LPA refused because the tree was In good health and was a prominent Landscape/amenity feature;

Consultants / Contractors

In many cases people have bought properties that contain a mature tree(s);

Subsequently they don't like the fact that the tree(s) sheds leaves, seeds, small deadwood etc and turn to a professional(s) to make applications on their behalf;

In many instances the TPO was created many years ago before the area was developed and the LPA has made the effort to ensure the best trees were retained and had enough space to continue to thrive;

The professional does not check the TPO, which if that had been done would have informed the advice given to the owner/client that -

An application was unlikely to succeed

Consultants / Contractors

Validity Issues

The first duty of a professional Arboricultral advisor is the check whether the TPO has been confirmed or not;

If it has not been confirmed then the order does not exist in law;

If an order has been confirmed but contains some errors in drafting it **IS NOT** invalid;

S284 (2) of the TACPA states that once confirmed "***The validity of any tree preservation order shall not be questioned in any legal proceedings whatsoever ...***"

http://www.legislation.gov.uk/ukpga/1990/8/section/284

There is no such thing as an invalid confirmed TPO!

Consultants / Contractors

As Arboricultural professionals we should know this and advise our clients accordingly;

However, I have seen and doubtless will continue to see examples of this not happening, e.g.

T2 is not an oak it's an alder and by the way T3 is not a willow it's a poplar therefore they are not covered and the order is invalid!!!!

We need to be careful here because once confirmed the order cannot be questioned and if the trees are pruned or felled that's an offence under s210 of the Act, AND

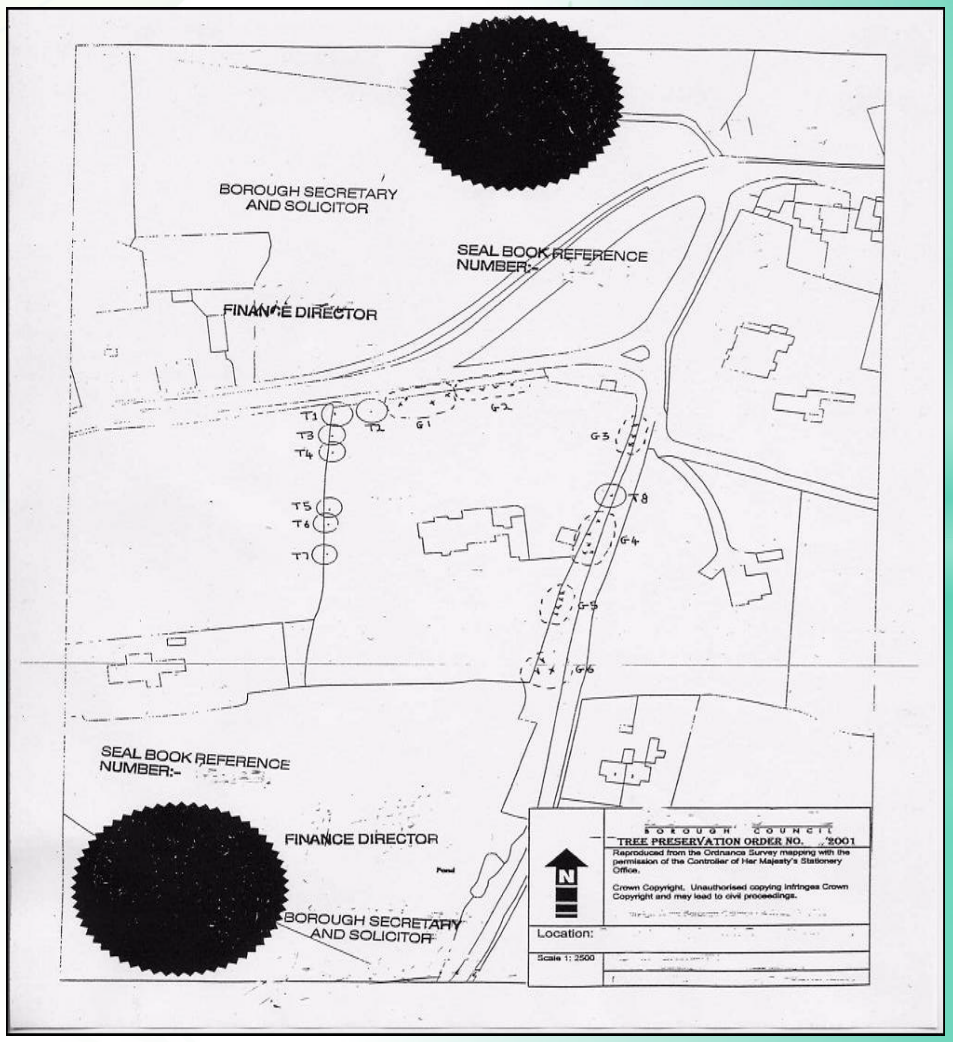
It is an offence of strict liability

Local Planning Authorities

A recent audit of 3,000 TPO files across some of the LPAs in England[1] revealed that:

1. The average number of TPOs is 417 (range 50 to 200);
2. Of these 20% (83) will have no proof of confirmation;
3. 35% (145) are over 20 years old;
4. The average number of 'Area' designations is 88.

Extrapolation of the numbers nationally suggests that there are over 36,000 unconfirmed TPOs



1. Round L (2006) E-Gov and TPOs the implications, Landscape Planning Group Ltd

Local Planning Authorities (LPAs)

Currently when an appeal is made the LPA has to submit a copy of the TPO and proof of confirmation amongst other documents;

There have been (all too common) instances where an application has been refused and an appeal lodged but the TPO has not been confirmed;

This has led to the creation of a new TPO some time after the application was determined and the appeal runs on the new TPO;

This is not good and brings the TPO system into disrepute;

Another issue is that when issuing copies of pre 06 April 2012 TPOs LPAs do not attach information to the effect that the TPO is now governed under the 2012 Regulations, which replaced all other preceding Regulations.

Local Planning Authorities (LPAs)

TPOs as Weapons:

Some LPAs use TPOs to gain more control over land than they would otherwise have, which in the context of development applications can sometimes be justified;

Some LPAs do not allow access to the TPO Register which they have a Statutory Duty to make available for public inspection –

Where's the site? Leave it with us and we'll get back to you;

Low and behold the site is now the subject of a TPO made the day following the query?

Local Planning Authorities (LPAs)

TPOs as Weapons – One Example of how bad this can be:

A full and detailed planning consent is granted for a £50 million urban regeneration scheme on a site that is within a Conservation Area;

There are six poor quality sycamore trees on the site within building foot prints;

The Tree/Arboricultural Officer tells the developer that he **MUST** serve a Section 211 Notice before the development can begin;

WHAT?

If an s211 Notice is served what's s/he going to do – create a TPO? Which is overridden by the full planning permission in any event!

Local Planning Authorities (LPAs)

TPOs as Weapons – Another Example:

Full and detailed planning permission is granted for a residential development supported by an AIA and AMS that shows some trees to be removed, trees that are in or very close to the new structure;

The developer arranges for the trees to be removed and the Tree/ Arboricultural Officer comes to site and stops all work on the grounds that the trees are subject to a TPO;

S/he goes back to the office and finds that the trees are NOT covered by a TPO nor are they in a Conservation Area;

S/he creates a TPO that is overridden by the extant full planning permission;

Is this the best use of resources?

Local Planning Authorities (LPAs)

Mischievous Prosecutions:

An LPA is given 5 days notice of the intention to remove large deadwood from some pine trees close to a block of flats;

The contractor removes the deadwood and is asked by the management company to trim a Leyland hedge, which he does;

A week later is served with a notice of intended prosecution for pruning live wood from the pine trees;

I know that the foliage of Leyland cypress is quite distinct from that of pine trees

Worrying!

Local Planning Authorities (LPAs)

Mischievous Prosecutions:

Consent is granted for tree works in a private garden covered by a 30 year old ‘area’ order;

When the contractor arrives on site he finds that a Lawson cypress has split out, is dangerous as it overhangs the footpath;

He calls the LPA to let them know he will be taking the cypress out and is told OK;

He takes the cypress out and photographs it beforehand;

He is prosecuted for violation of the TPO and this runs all they way to court before the LPA agrees that it got it wrong and withdraws the charges but still tried to issue an official caution.

Threats to the System

Poor administration of the system by some (not all) LPAs brings the system into disrepute;

Using TPOs as weapons is not good and brings the system into disrepute;

Non Confirmation of TPOs and subsequent creation of new TPOs after applications have been made and determined poses a threat to the system;

Bringing mischievous prosecutions does not help;

Applications for tree removal for reasons that don't stand up to close scrutiny does not do much for the credibility of the system;

Not checking the confirmation status of TPOs and advising owners/ clients of the likelihood of refusal does little to help.

Threats to the System

Of more concern are the rumours that the Planning Inspectorate (PINS) will possibly suspend the use of the Arboricultural Non Salaried Inspectors (NSIs) in favour of using salaried planning inspectors ‘trained’ in Arboriculture;

This is a retrograde step in my opinion.

It is my perception that LPA Tree Officers and Arboricultural Professionals may not always agree with Appeal Decisions but at least they have confidence that the Arboricultural Issues have been addressed by Arboriculturists with relevant knowledge and experience;

Threats to the System

To revert to ‘non Arboricultural’ inspectors would take us back to the situation that led to the use of Arboricultural NSIs in the first place;

That is the number of complaints about the decisions of ‘in house’ inspectors;

If this happens it would undermine the credibility of TPOs and the TPO system;

If the rumours are true and this comes to pass then some serious lobbying is needed to put pressure on PINS not to do this –

So, the AA should step up and take the lead on this and the other tree officer groups NATO, LTOA, MTOA & RTOGS should be in there as well.

Thank You For Listening

END

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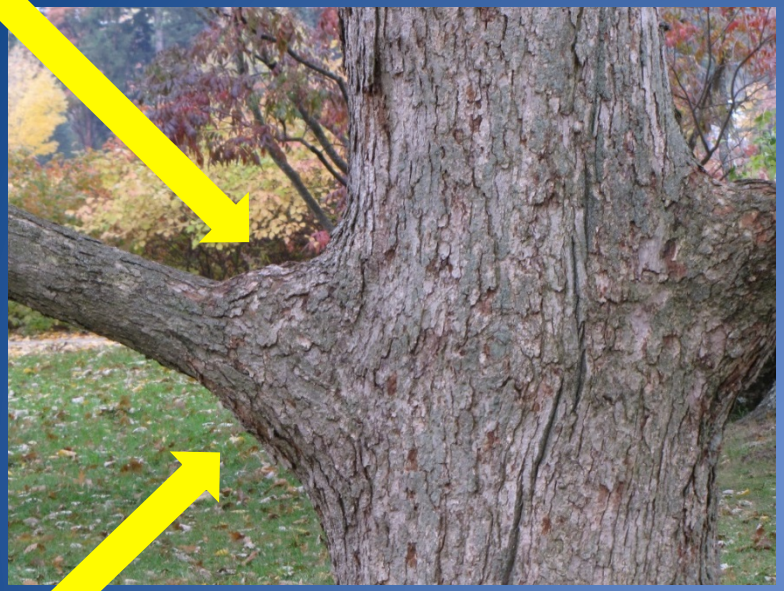
Removal pruning cuts on branches that lack branch collars

Jason ‘Jake’ Miesbauer, Ph.D
The Morton Arboretum
Lisle, Illinois, U.S.

When branch collars are present…

… a review

When branch collars are present…



When branch collars are present…

When branch collars are present…

When branch collars are present…

Natural target pruning

- Removal of branch just beyond the visible collar
- Typically (but not always) perpendicular to branch axis

When branch collars are present…

Tree response to natural target pruning

- Branch protection zone
  - Chemical defense to slow decay progression

Notice the cone-shaped area attenuating dysfunctional wood

Tree response to natural target pruning

- Branch protection zone
  - Chemical defense
- **Barrier zone**
  - **Wall 4 in CODIT Model**

Tree response to natural target pruning

Woundwood formation

- Post-injury growth response to close over the wound
- Complete closure (occlusion) reduces the amount of oxygen available for decay causing organisms
- Increased strength for mechanical support

But what about when there is no branch collar present?

But what about when there is no branch collar present?

Research questions

- Was there a difference between cut angle treatments in amount of dysfunctional wood (decay + discolored wood) or wound closure?

- Was there a relationship between other variables (cut size, aspect ratio, sprouting) and the amount of dysfunctional wood or wound closure?

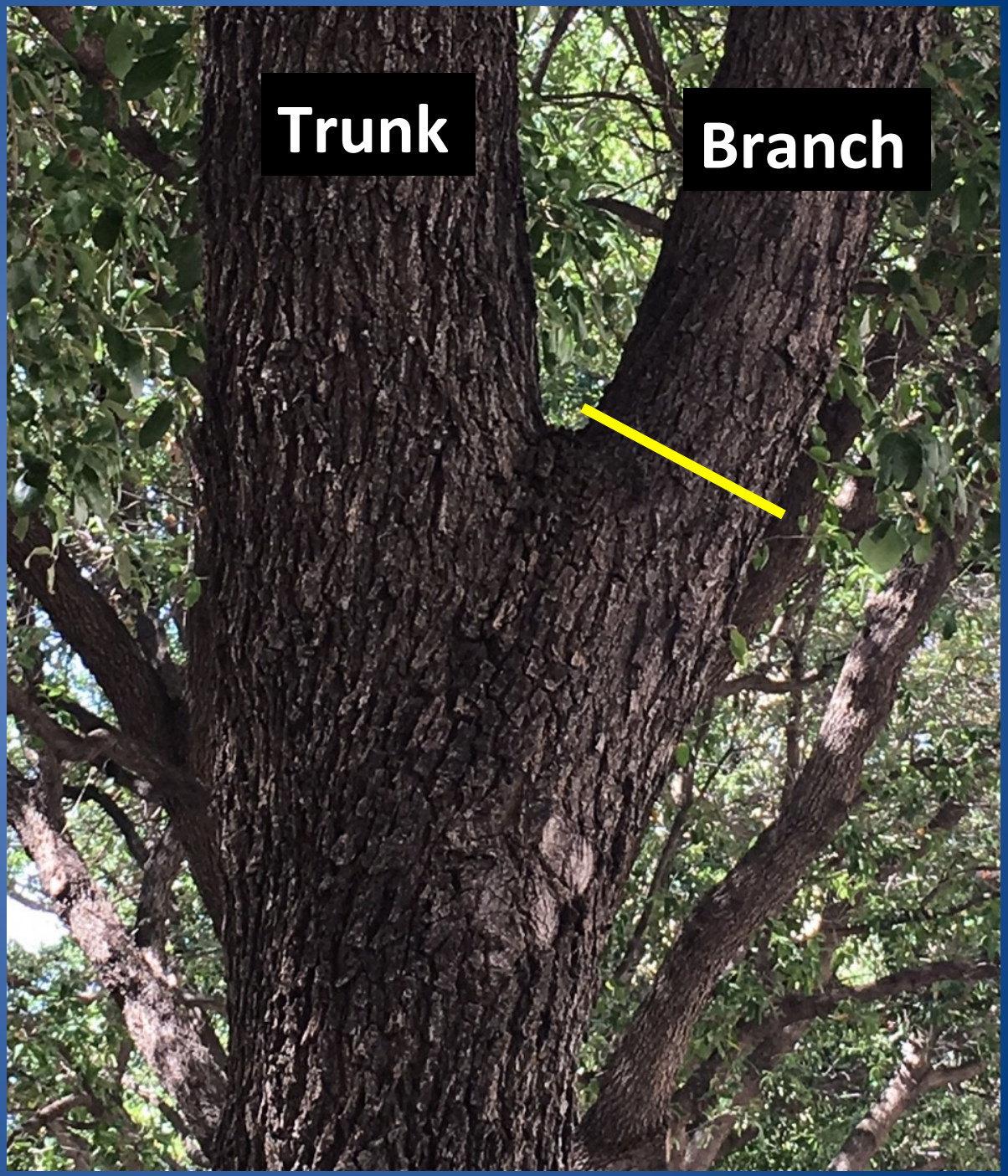
This study

- Live oak (*Quercus virginiana*) (N=102 from 36 trees)
- Red maple (*Acer rubrum*) (N=90 from 40 trees)

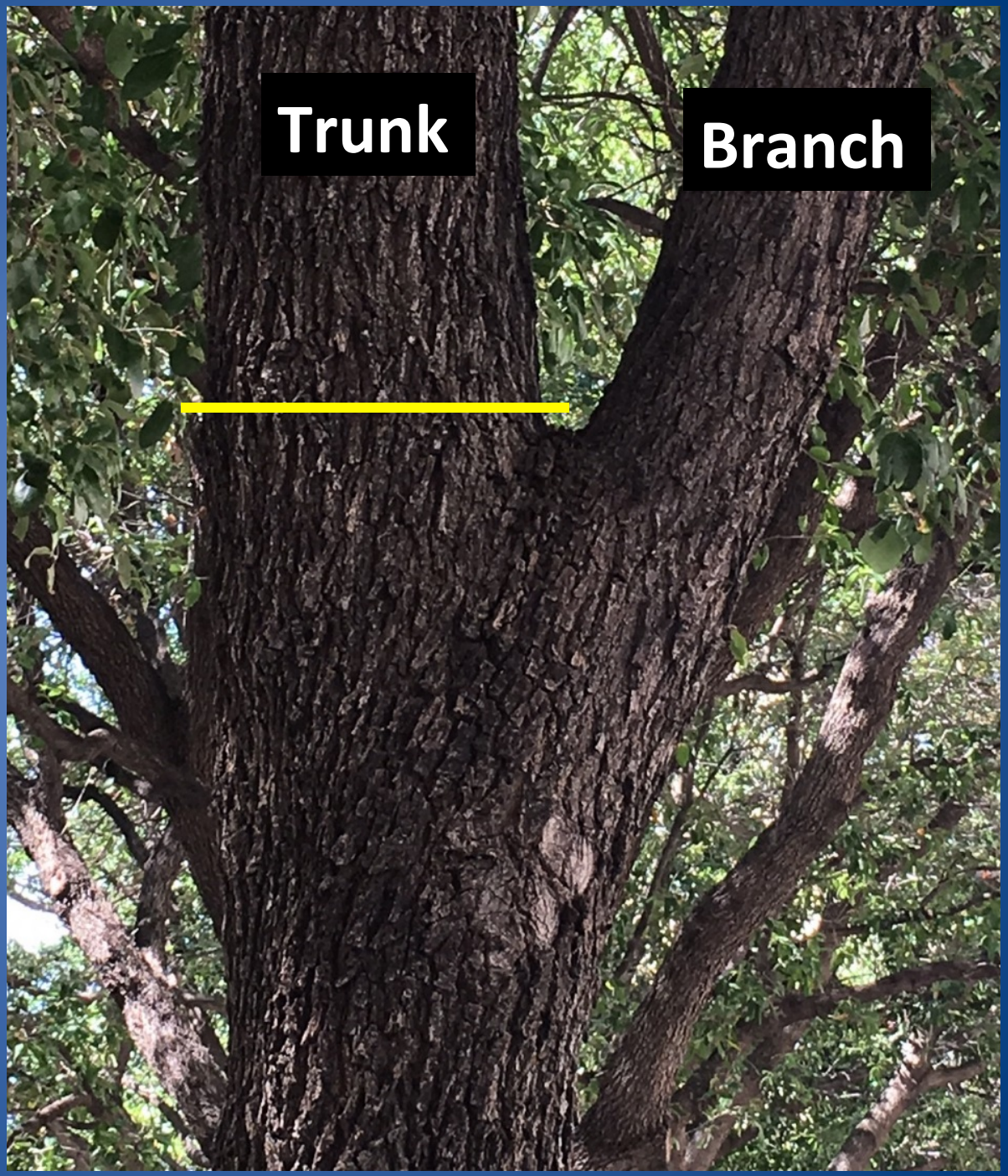
- 2 removal pruning cut angles:
  - Perpendicular to branch axis
  - 45 degrees to branch bark ridge

Branch base diameter

Size range:
Oaks: 3.0-12.4 cm
Maples: 3.2-13.5 cm

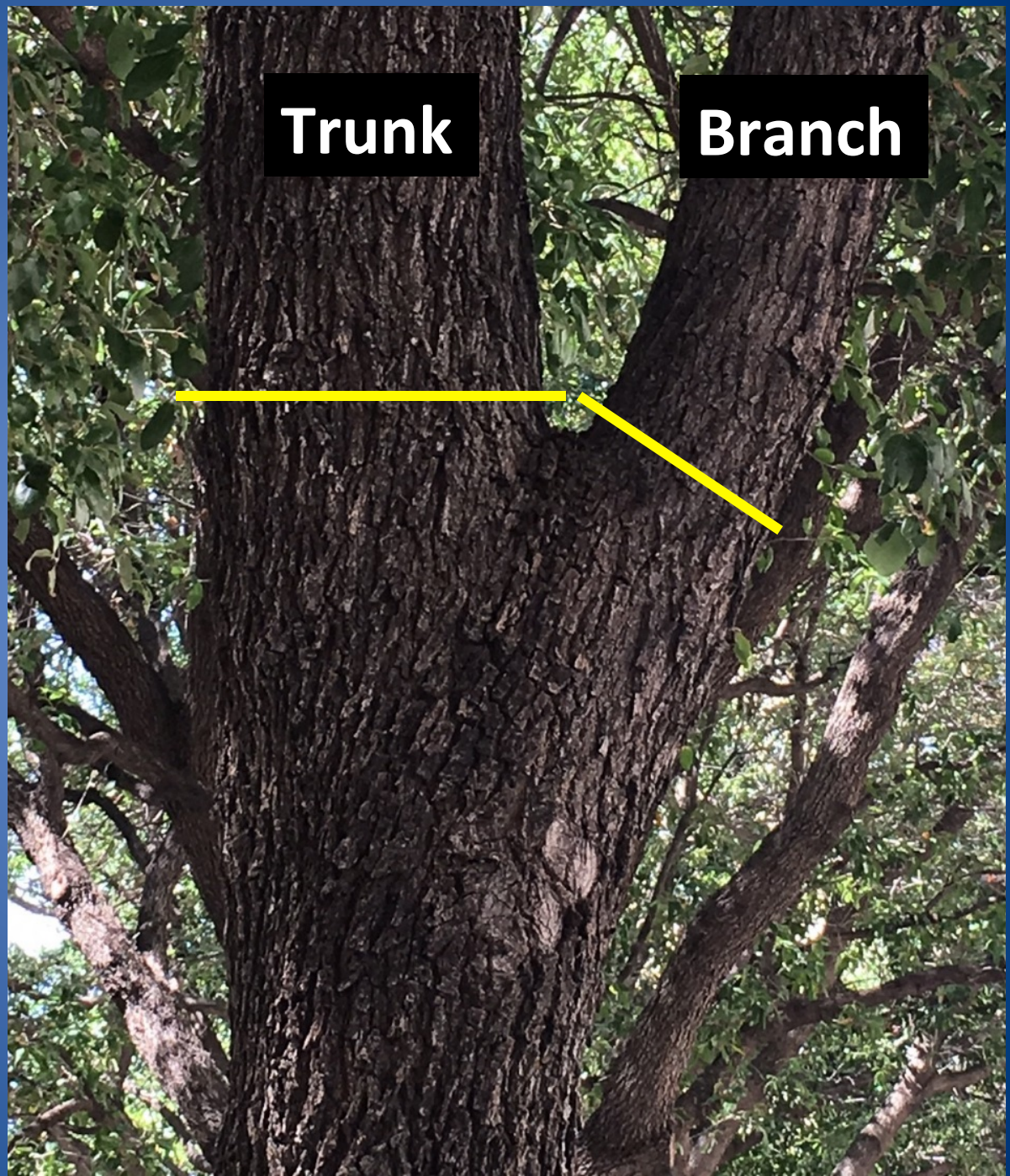


Trunk diameter measured just above the branch



Aspect ratio =
Branch base diameter/
Trunk diameter

Aspect ratio range:
Red maple: 0.42-0.99
Live oak: 0.21-0.95



Applied pruning treatments in November 2012

Perpendicular to longitudinal branch axis

- Minimizes cut surface area
- Just beyond apex of branch bark ridge

45 degree angle from branch bark ridge

- Larger cut surface area
- Bottom of cut closer to trunk

NOT FLUSH CUTS!

Did not cut into trunk wood

1 year later

3 years later – right before harvest

Photo: Ed Gilman

Harvested in November 2015

Post harvest and dissection measurements

- Woundwood thickness on top, bottom, and sides prior to dissection

Post harvest and dissection measurements

- Area of wound exposure remaining

Post harvest and dissection measurements

- Area of wound exposure remaining
- **Percent closure = (cut area - area of opening/cut area)*100**

Post harvest and dissection measurements

- Number and diameter of sprouts
- Distance to edge of wound

Dissection cuts made to expose branch and trunk pith

Noted if woundwound was closed over or not

Woundwood closure over pruning cut

Post harvest and dissection measurements

- Depth of dysfunctional wood

Post harvest and dissection measurements

- Traced perimeter of dysfunctional wood and calculated area
  - ImageJ software

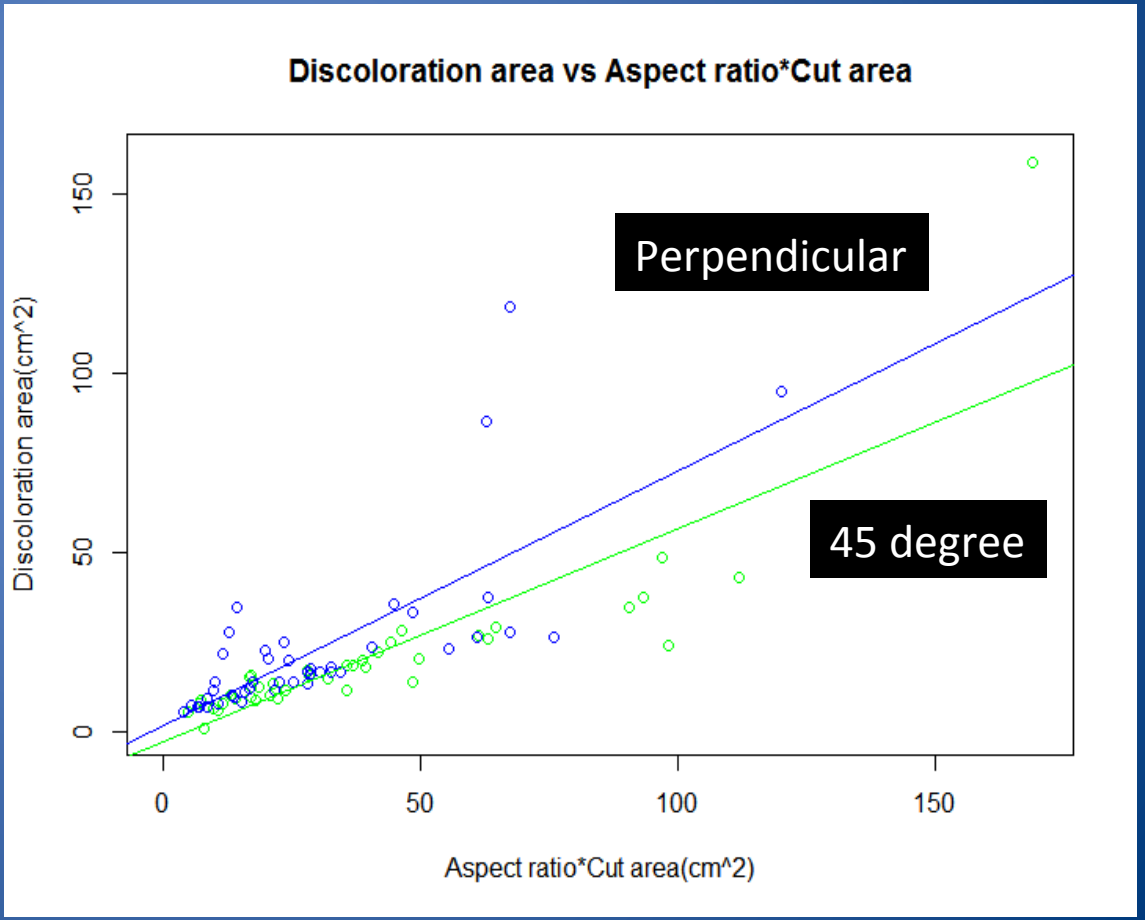
Results…

Red maple – Dysfunctional wood

Aspect ratio*Cut area was best predictor of increased dysfunctional wood area

P-value < 0.001

Puts cut size on a "weighted scale"



R-squared = 0.6369

Aspect ratio

Small (.35)

Large (.95)

Red maple – Dysfunctional wood

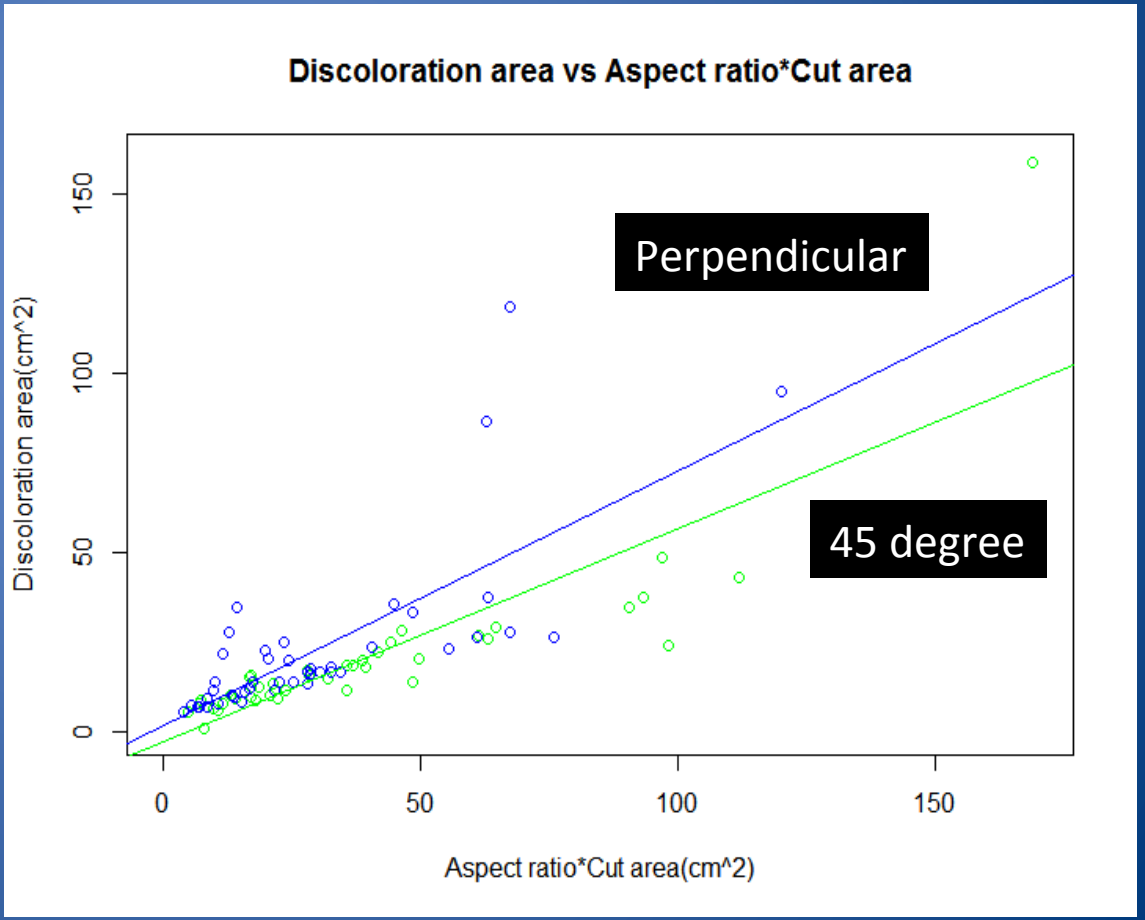
Aspect ratio*Cut area was best predictor of increased dysfunctional wood area

P-value < 0.001

Both cut angles increased; perpendicular did more so

P-value = 0.0076

R-squared = 0.6369



Live oak – Dysfunctional wood

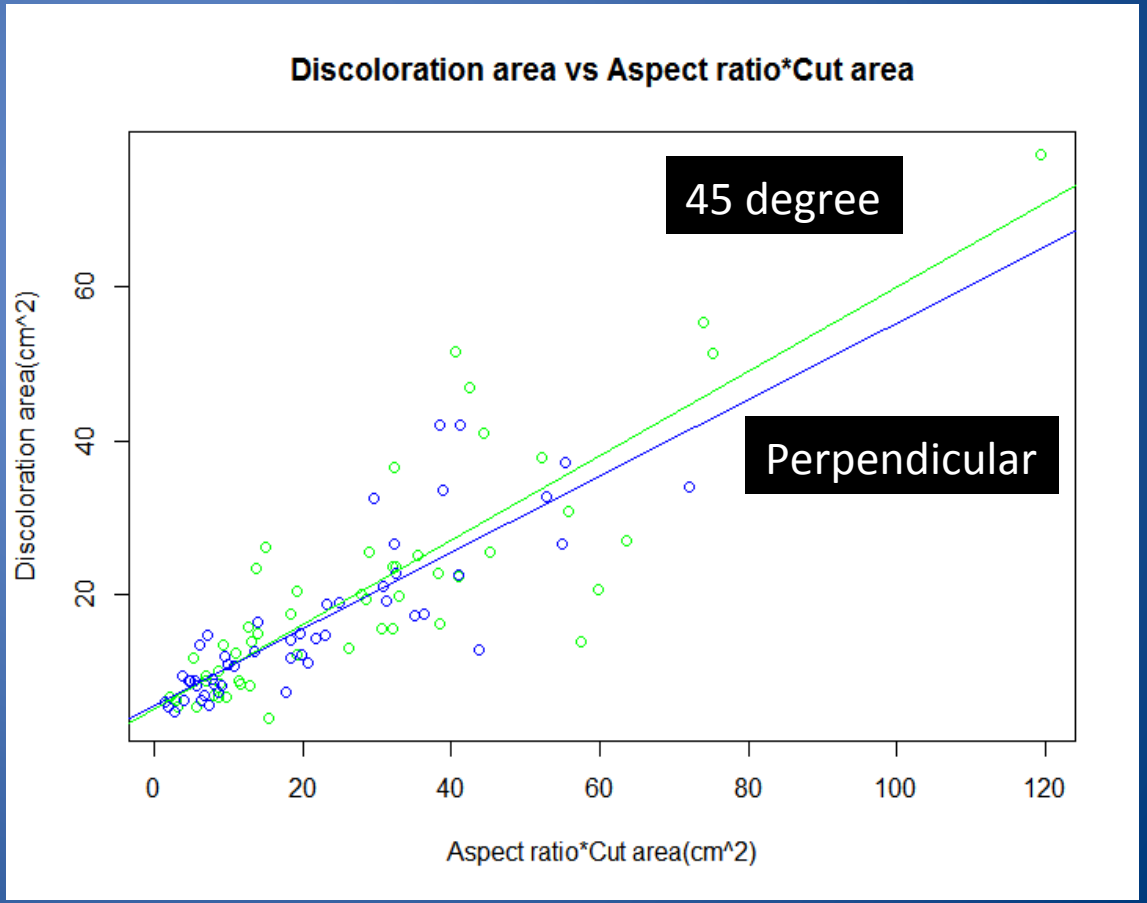
Aspect ratio*Cut area was best predictor of increased dysfunctional wood area

P-value < 0.001

Cut type was not significant

P-value = 0.577

R-squared = 0.7199



Complete wound closure

- Live Oaks:
  - 4 of the 45 degree from BBR
  - 2 of the perpendicular to branch axis

- Maples:
  - 4 of the 45 degree from BBR
  - 6 of the perpendicular to branch axis

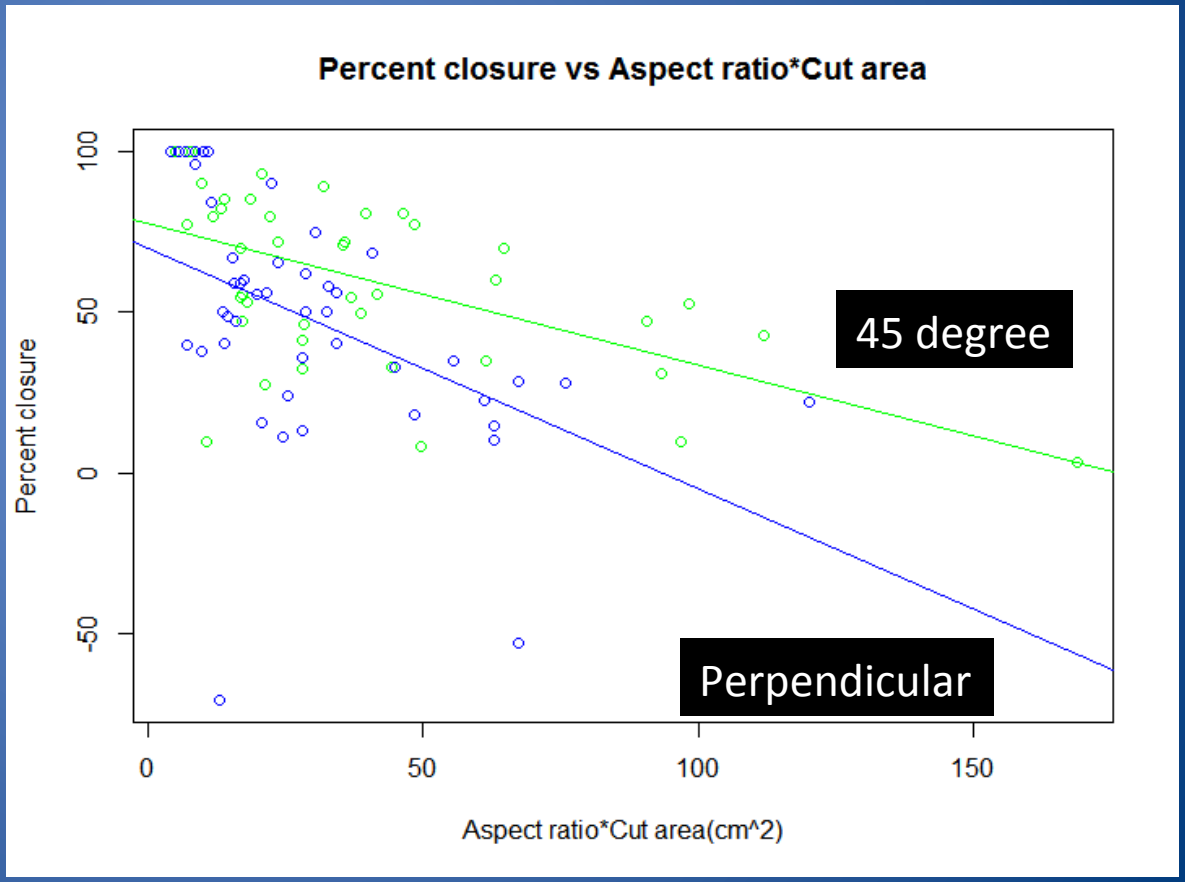
Red maple – percent closure

Aspect ratio*Cut area was best predictor of percent wound closure

P-value < 0.001

Both cut angles decreased; perpendicular did more so

P-value < 0.005



R-squared = 0.274

Red maple – percent closure

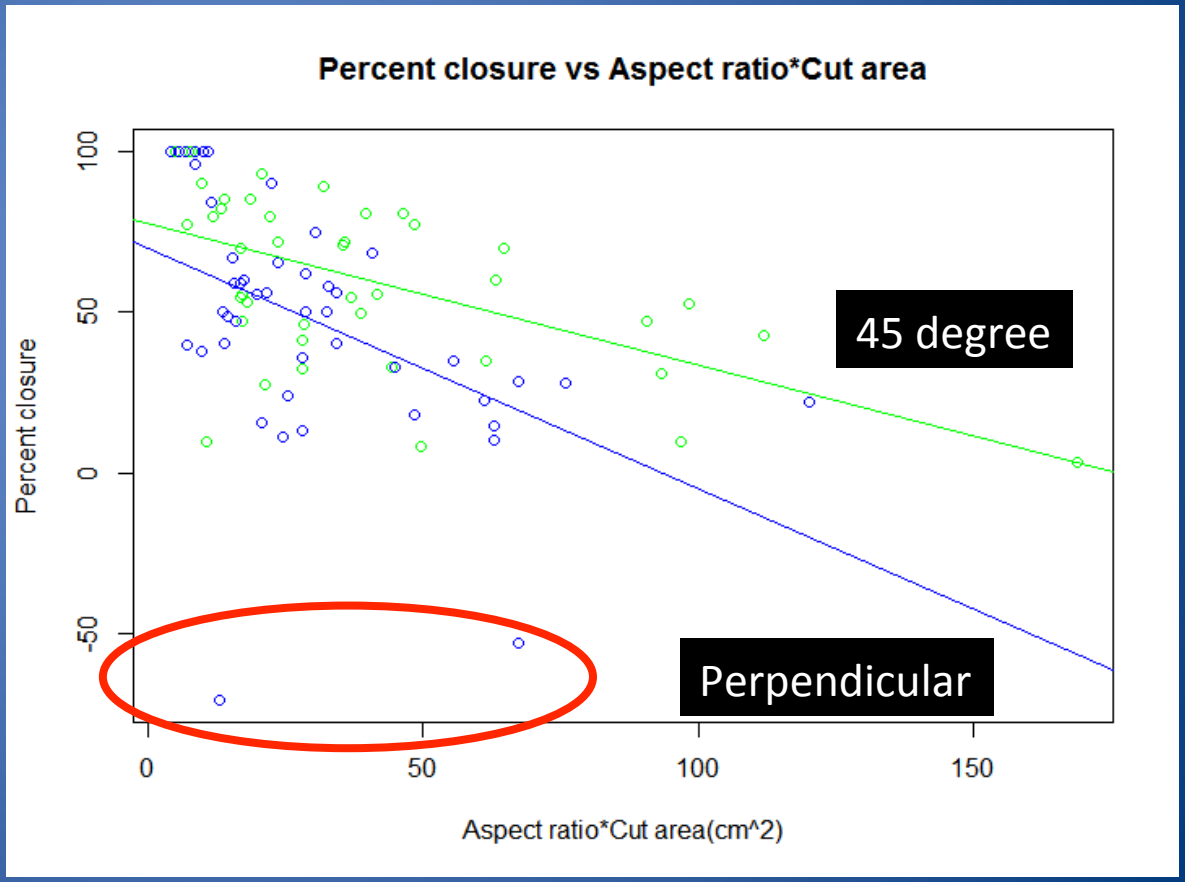
Aspect ratio*Cut area was best predictor of percent wound closure

P-value < 0.001

Both cut angles decreased; perpendicular did more so

P-value < 0.005

R-squared = 0.274



Cambium dieback at branch base

Barrier zones

Live oak – percent closure

- Cut angle, cut size, aspect ratio, and all interactions were not significant (P-value >0.05)

Other observations…

Dysfunctional wood often asymmetric, with more below pith

Dysfunctional wood often asymmetric, with more below pith

- Restricted through the compacted xylem

Dysfunctional wood often asymmetric, with more below pith

- Restricted through the compacted xylem
- Non-functional vascular tissue

Summary

- As the variable ‘cut size*aspect ratio’ increased, so did the area of dysfunctional wood in both red maple and live oak
  - For red maple, this relationship was greater for cuts perpendicular to branch axis than those 45 degrees to BBR
  - Cut angle was not significant for live oak

Summary

- As the variable ‘cut size*aspect ratio’ increased, so did the area of dysfunctional wood in both red maple and live oak
  - For red maple, this relationship was greater for cuts perpendicular to branch axis than those 45 degrees to BBR
  - Cut angle was not significant for live oak
- **As the variable ‘cut size*aspect ratio’ increased, percent wound closure decreased for red maple, and the difference was greater for perpendicular cuts. None of the measured variables affected percent closure in live oak.**

Summary

Findings support pruning recommendations to:

1. **Minimize size and aspect ratio of removal cuts**

2. **Make removal cut at an angle closer to parallel with trunk (e.g. 45 degrees to BBR) than perpendicular to branch axis (red maple).**

Acknowledgements

Tree FUND

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Tree Research & Education Endowment Fund

Sky Frog Tree Service

Chris Harchick

Marvin Lo


Thank you!


I give up!
I RETIRE!!!

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