# Wildlife BMPs for Tree Care





California Urban Forests Council
Annual Conference
Life Among the Leaves
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Ryan Gilpin
HortScience
ryan@hortscience.com
bmp@treecareforbirds.com

TreeCareForBirds.com



## **Presentation Outline**

- Tree Care for Birds and Other Wildlife (5 minutes)
- Awareness training (15 minutes)
  - Why are wildlife important?
  - Determining category
  - Working within categories
  - Responding to emergencies
- Questions/small topics (20 minutes)



Burrowing owl



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Burrowing owl



- Roster 90 members
- Project endorsers 30 individuals and groups
  - Arborists and tree care businesses
  - International Society of Arboriculture (funding from Britton Fund)
  - Wildlife conservation non-profits (several Audubon chapters)
  - State and local agencies (funding from CALFIRE)
  - Nature centers, wildlife rehabilitation centers





### 2015-2016

- Quarterly workshops
- Website with existing educational materials
- ☑ Scientific literature review
- ☑ Draft Best Management Practices
- ☑ Work with agencies, cities, utilities, arborists, birders, and other wildlife advocates

### 2017-2018

- Continue quarterly workshops
- □ Release Best Management Practices
- Advocate that agencies and arborists adopt new standards
- □ Set criteria for training program
- Expand educational resources





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 Provide recommendations to tree crews in minimizing impacts to wildlife

- May 2016 Initial framework
- January 2017 Draft document
- July 2017 Final document released

September 2017 – launch new website



Red-breasted nuthatch



### **Tree Care for Birds**

Unlocking the power of arboriculture to enhance habitat

Home **Project Documents** Training & Education V Resources V Photos About Us

## **Project Documents**

Tree Care for

Wildlife Best

### **Management Practices**

- Preventing Harm to Wildlife
  During Tree Care
- Preventing Harm to Wildlife
  During Tree Care- SPANISH





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Tree Care for

Wildlife Best

**Management Practices** 



- Preventing Harm to Wildlife
  During Tree Care
- Preventing Harm to Wildlife
  During Tree Care- SPANISH





# Tree Care for Wildlife Best Management Practices in California



Tree Care for Birds and Wildlife

Kara Donohue, Ryan Gilpin, and Corey Bassett

www.treecareforbirds.com

bmp@treecareforbirds.com



### Preventing Harm To Wildlife During Tree Care

Almost all bird nests are protected by law. The tree care worker can reduce harm to wildlife, comply with bird regulations, and know how to protect wildlife habitat. Become familiar with the Best Management Practices and other materials at:

www.treecareforbirds.com.

#### Job Steps Affected by this Topic

- Working during the nesting season vs the nonnesting season.
- Preparation before work begins.
- Actions when safety concerns conflict with wildlife regulations.
- · Action when wildlife are accidentally impacted.

#### **Potential Risks**

- Harming wildlife unnecessarily.
- Violation of bird regulations and possible fines.
- Negative public relations.



Immature songbird by Four Oaks

#### WILDLIFE EMERGENCIES

If you find injured wildlife or an immature bird out of its nest, call a Wildlife Rehabilitation Center before intervening. Parents are highly likely to continue caring for immature birds when they have fallen out of the nest. It is against the law to take a wild bird home as a pet.



## Awareness Training Video





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- Questions/small topics (20 minutes)



Northern mockingbird



### Main Point

 If you find a nest with eggs or young wildlife in it, stop working near it

Ultimately, the person who impacts the nest is responsible

 Can find nesting wildlife anytime, anywhere. Some times and areas are more likely.



Anna's hummingbird



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Western bluebird



## Migratory Bird Treaty Act 1918

- Treaty between US, Canada, Japan, Mexico and Russia.
  - Don't kill or injure native birds, fledglings, eggs or active nests.

Active – occupied of eggs or nestlings, or is otherwise essential to the survival of a juvenile bird

- Would include scaring off parents leaving young or eggs to die.
- \$15,000 fine and jail
- Congress discussing changes
  - California has similar law



## MBTA started because of women's hat fashion





**Federal** 

State

**Both** 

Eagle Act

Endangered

**Species Act** 

CA FWS 3503.5

Migratory Bird Treaty
Act

**CA FWS 3503** 

**Animal Cruelty** 

Few species

Many species

www.animallaw.info/



Federal

State

Both

Eagle Act

Endangered

**Species Act** 

CA FWS 3503.5

Migratory Bird Treaty
Act

**CA FWS 3503** 

**Animal Cruelty** 

More restrictive

Less restrictive

www.animallaw.info/



- Most birds and nests that have eggs or young nests are legally protected
- Some nests are protected when no eggs or young
- Some other wildlife have legal protections
- Laws are about outcomes, not actions



Eastern fox squirrel



# Why are wildlife important? - Public

- Wildlife is important to many clients and members of the public
  - 550,000 Audubon members in North America
  - Americans spent \$41 billion on birding in 2011

 Even if not concerned about law enforcement, may be concerned about negative publicity



Canada goose

www.audubon.org www.fws.gov



# Why is wildlife important? - Ecosystem



### Keeping Oak Woodlands Healthy



If the birds are there, the oak woodland is healthy.

How do you know if your oak woodland is healthy? Look for these 12 oak woodland focal species—together they feed and nest in the different layers of a healthy oak woodland forest. Healthy oak woodlands are important habitats for birds and other wildlife, and also places where we farm and ranch. Healthy oak woodlands provide food, cover, and safe access to water for over 300 different kinds of birds, mammals, reptiles, and amphibians—more than any other habitat in California. If the birds are there, your oak woodland is healthy! Tips for keeping your oak woodland forest healthy are on page 2.

	Acorn Woodpecker	Oak Titmouse	Nuttall's Woodpecker	Northern Flicker	White-breasted Nuthatch	Ash-throated Flycatcher	Lawrence's Goldfinch
Photos Courtesy of Tom Grey							

rtesy of	arrow	Lark Spar	Yellow-billed Magpie	Western Scrub-Jay	California Quail	Western Bluebird	
Tom Grey			R				Photos Courtesy of Tom Grey



# Why is wildlife important? - Ecosystem

Wildlife are bioindicators of forest health

 Every young bird leaving a nest in the trees that we care for show that we are caring for our urban forests.

 Why limit our discussion on the benefits of the urban forest?



Western tanager



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American robin, Melissa Orozco



# **BMP Categories**

	Habitat Value			
Breeding season	Low	High	Riparian	
Breeding season February - August	Category 2	Category 3	Category 3	
Non-breeding season Sept - January	Category 1	Category 2	Category 3	



# BMP Pre-Work Inspection Form

Inspector: Co	rtification Level: Date:
Time:	Weather conditions:
Description of work:	
Wildlife Biologist:	Wildlife Rehabilitator:
	Habitat Value
Low	
☐ High human use	<u>High</u>
<ul> <li>High impervious surfaces</li> </ul>	<ul> <li>Low human use</li> </ul>
<ul> <li>Low plant species diversity</li> </ul>	<ul> <li>Low impervious surfaces</li> </ul>
<ul> <li>Low plant structural diversity</li> </ul>	<ul> <li>High plant species diversity</li> </ul>
<ul> <li>Far from water bodies</li> </ul>	<ul> <li>High plant structural diversity</li> </ul>
<ul> <li>Few mature, dead and dying trees</li> </ul>	<ul> <li>Close to water bodies</li> </ul>
□ Few/no wildlife present	<ul> <li>Many mature, dead and dying trees</li> </ul>
	<ul> <li>Abundant wildlife present</li> </ul>
<u>Riparian</u>	
<ul> <li>Within or adjacent to water bodies</li> </ul>	Breeding Season
<ul> <li>Within or adjacent to dry water chann</li> </ul>	ls □ Breeding Season (Feb. 1 – Aug. 31)
□ Riparian vegetation present	□ Non-breeding Season (Sep. 1 – Jan. 31
9000000	Category
☐ Category 1	□ Category 2 □ Category 3
Recommended level of training:	





Brian French



### Riparian

- □ Within or adjacent to water bodies
- ☐ Within or adjacent to dry water channels
- □ Riparian vegetation present

### High

- Low human use
- □ Low impervious surfaces
- □ High plant species diversity
- □ High plant structural diversity
- □ Close to water bodies
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Monica Edwards



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# Low Value Habitat



Brian French



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Brian French



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#### Low

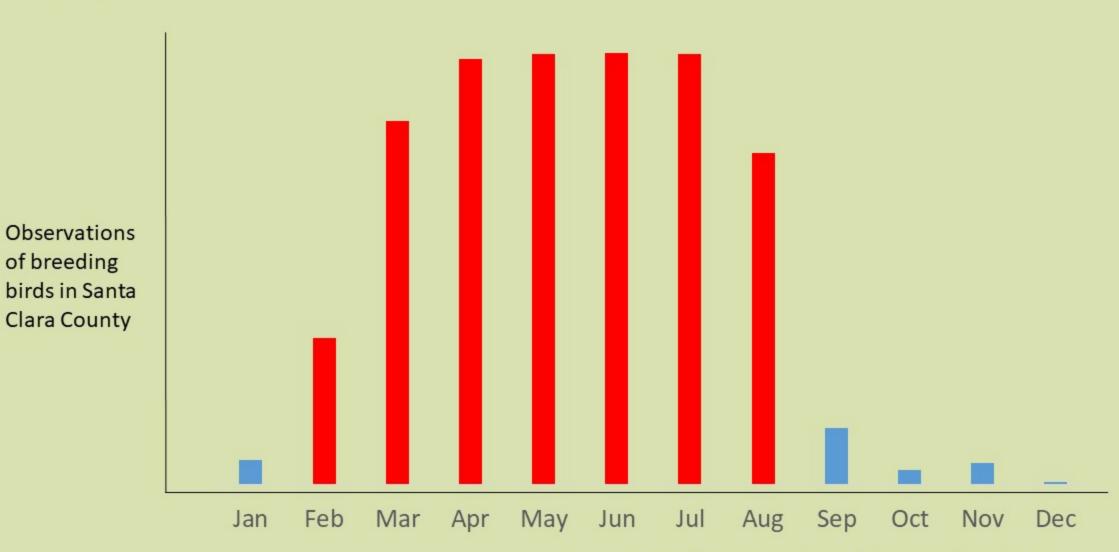
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Brian French



## **Breeding Season**



Data from Sequoia Audubon Society 2001



# **BMP Categories**

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### **BMP** Categories

- How much training might be adequate to handle different wildlife situations?
- Category 1 Awareness training
- Category 2 Wildlife Trained Arborist
- Category 3 Wildlife biologist



Western scrub jay



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Mourning dove

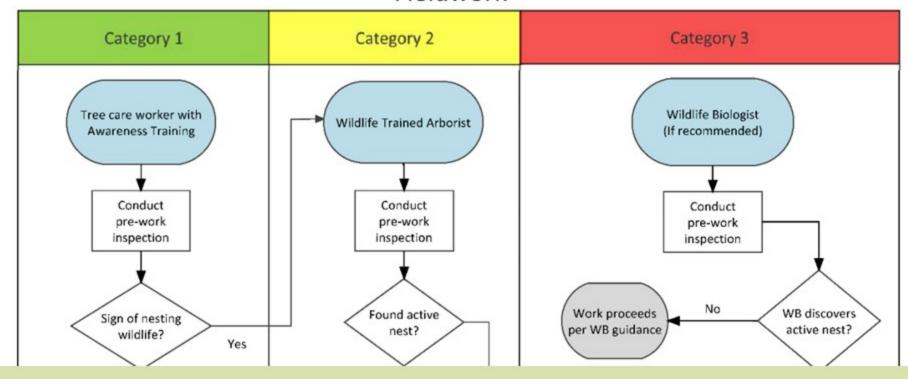


## Working Within Categories

#### **Project Preparation**

	Low value habitat	High value habitat	Riparian habitat
Non-breeding season	Category 1	Category 2	Category 3
Breeding season	Category 2	Category 3	Category 3

#### **Fieldwork**





### Wildlife Biologist and Rehabilitator

#### Wildlife Biologists

Web search – "consulting ecologist (City name)" www.treecareforbirds.com

#### Wildlife Rehabilitator

Web search – "wildlife rehabilitator (City name)" www.wildlife.ca.gov/Conservation/Laboratories/Wildlife-Investigations/Rehab/Facilities



Osprey with nest



### Wildlife Biologist and Rehabilitator

**Daniel Edelstein** 

danieledelstein@att.net

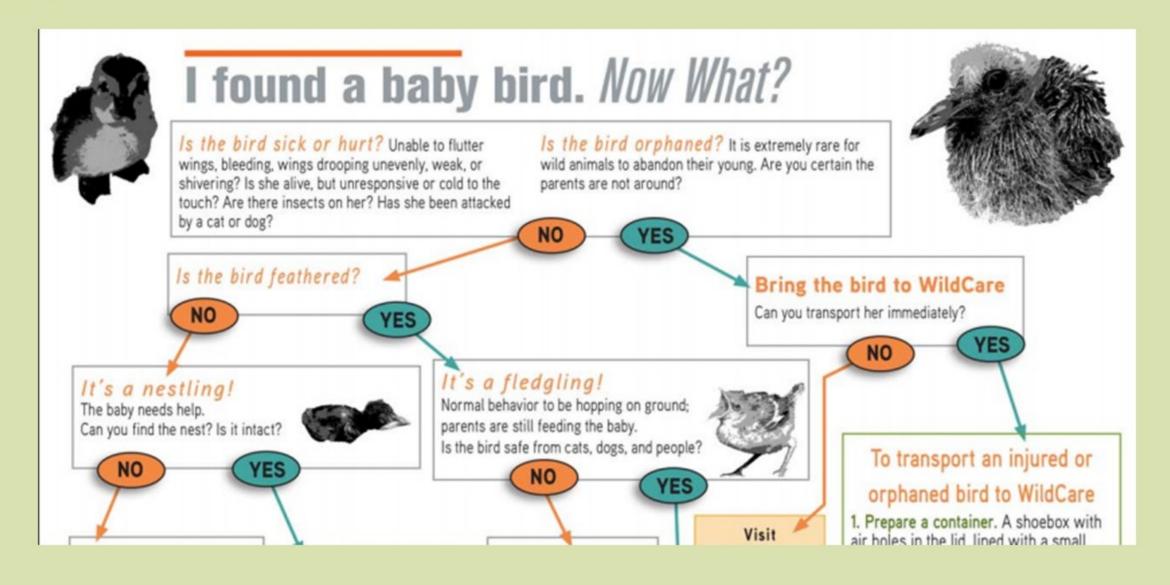
415-382-1827

www.warblerwatch.com

WildCare 76 Albert Park Lane San Rafael, CA 94901 415-456-7283 www.discoverwildcare.org



#### WildCare Flow Chart





### Pre-work Inspection

#### Inspection

- ☐ Scan the sky, trees, ground, shrubs, and branches.
- Check trunk or branch cavities and holes in the ground.
- Listen for wildlife sounds.
- Look for wildlife flying or running away.

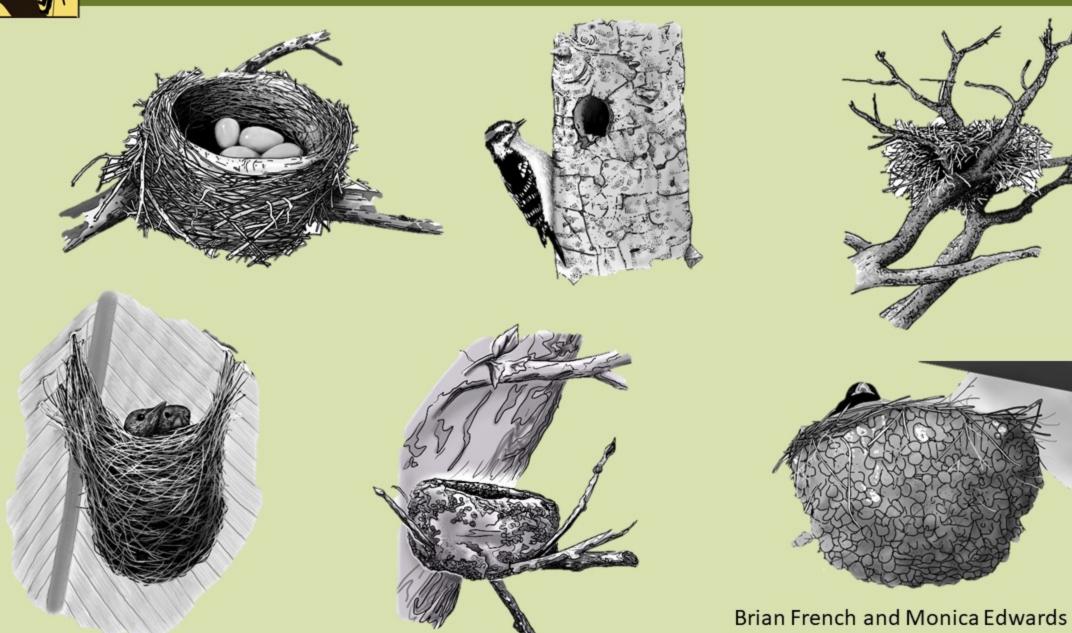
#### Signs of nesting wildlife

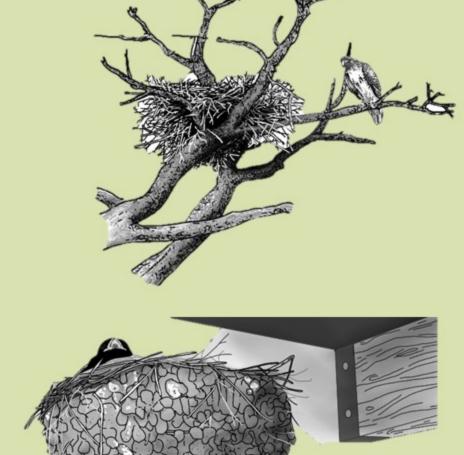
- Nests that may have eggs or young
- Concentrations of white colored droppings
- ☐ Wildlife exhibiting breeding behavior
- ☐ Wildlife carrying nesting materials
- ☐ Wildlife repeatedly visiting an area

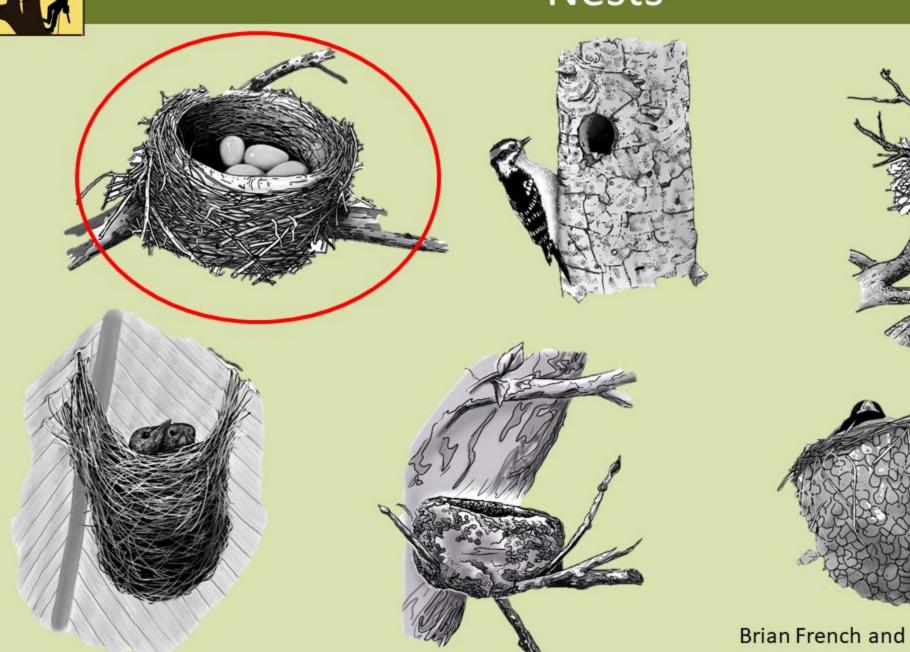


Monica Edwards

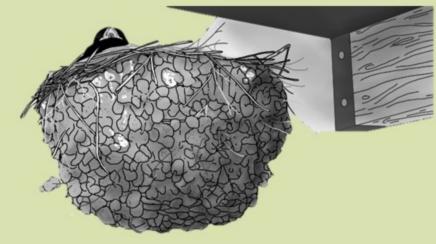






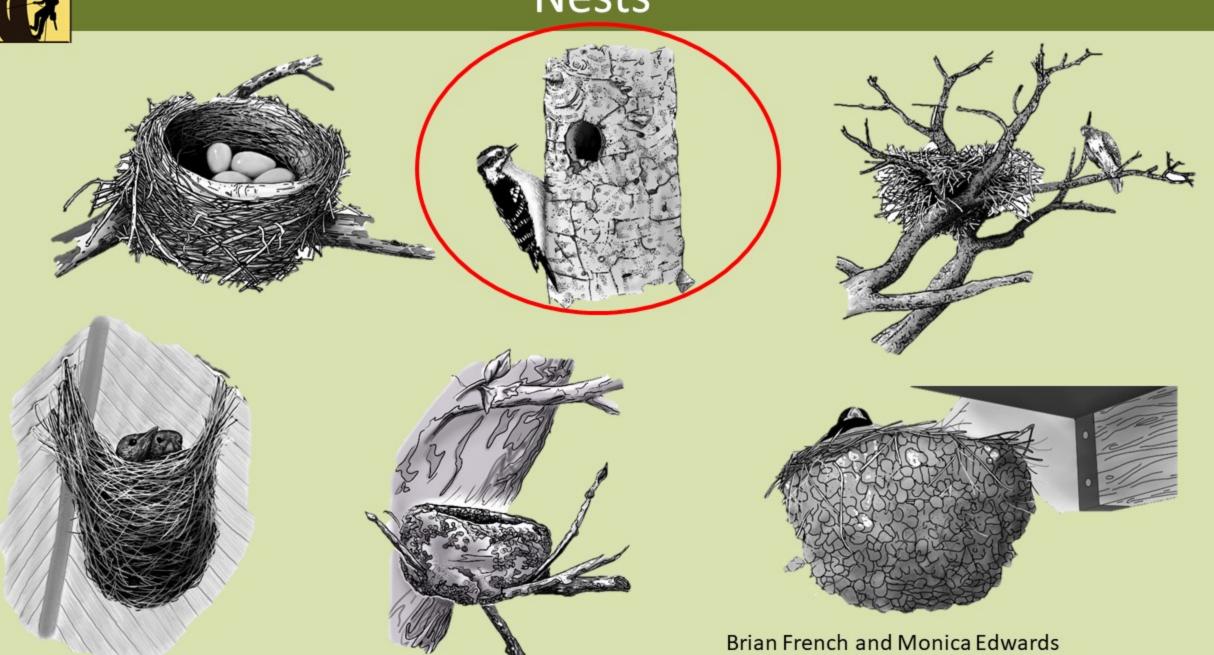






Brian French and Monica Edwards

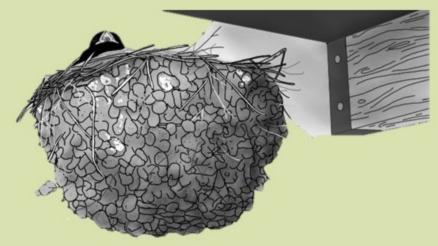






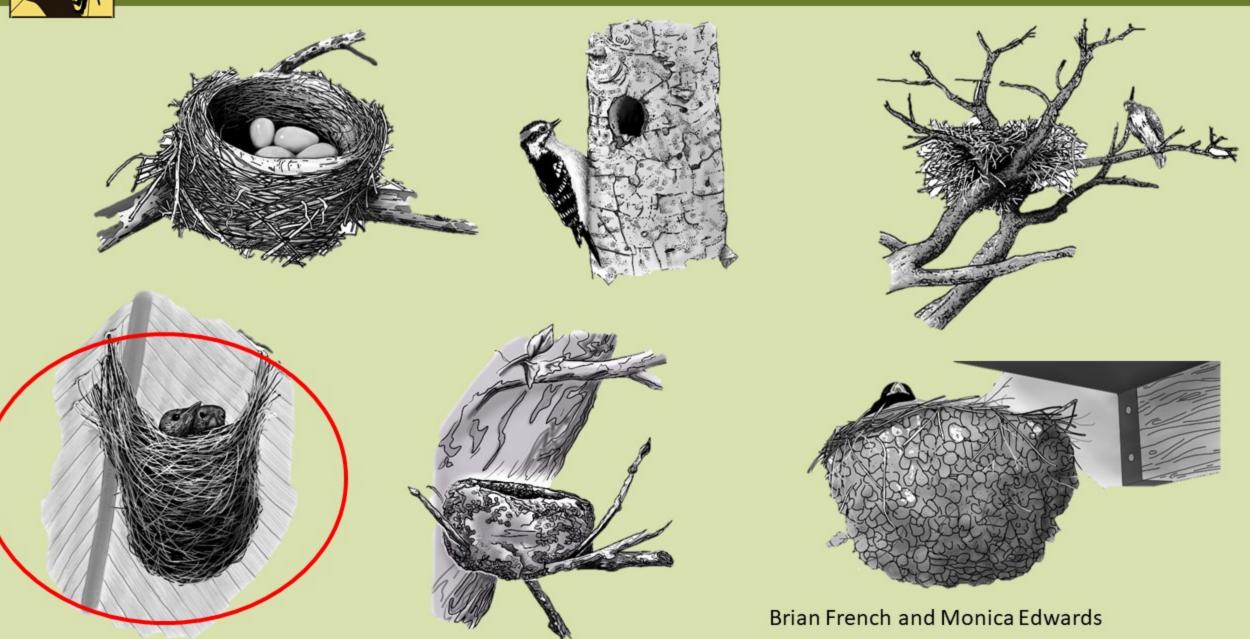




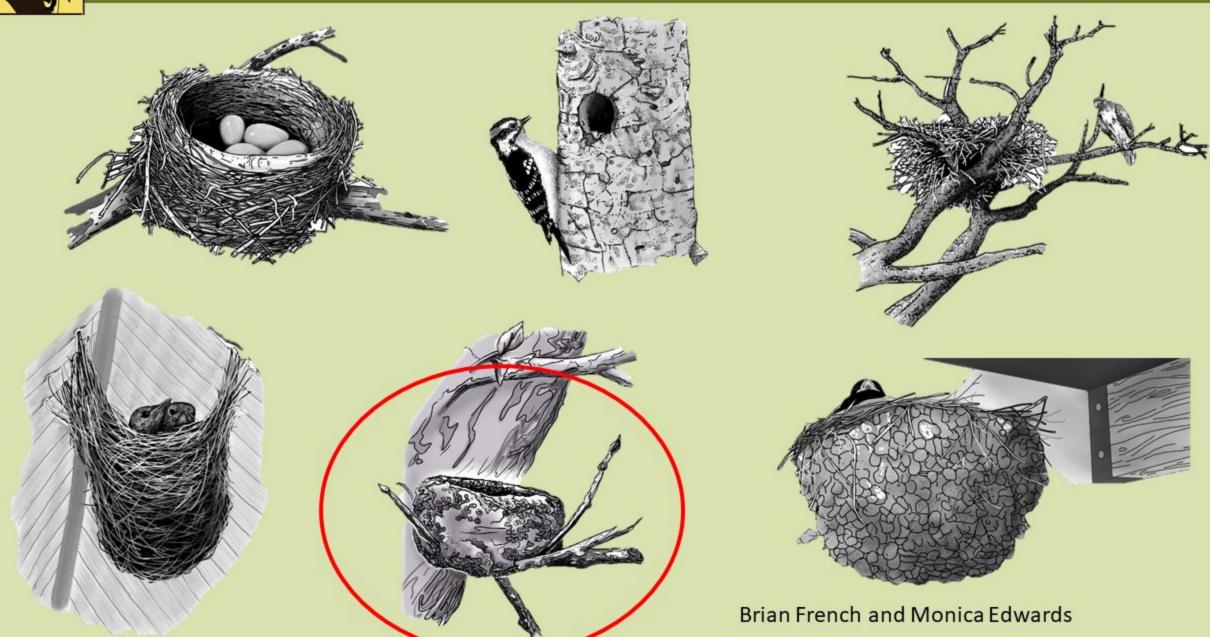


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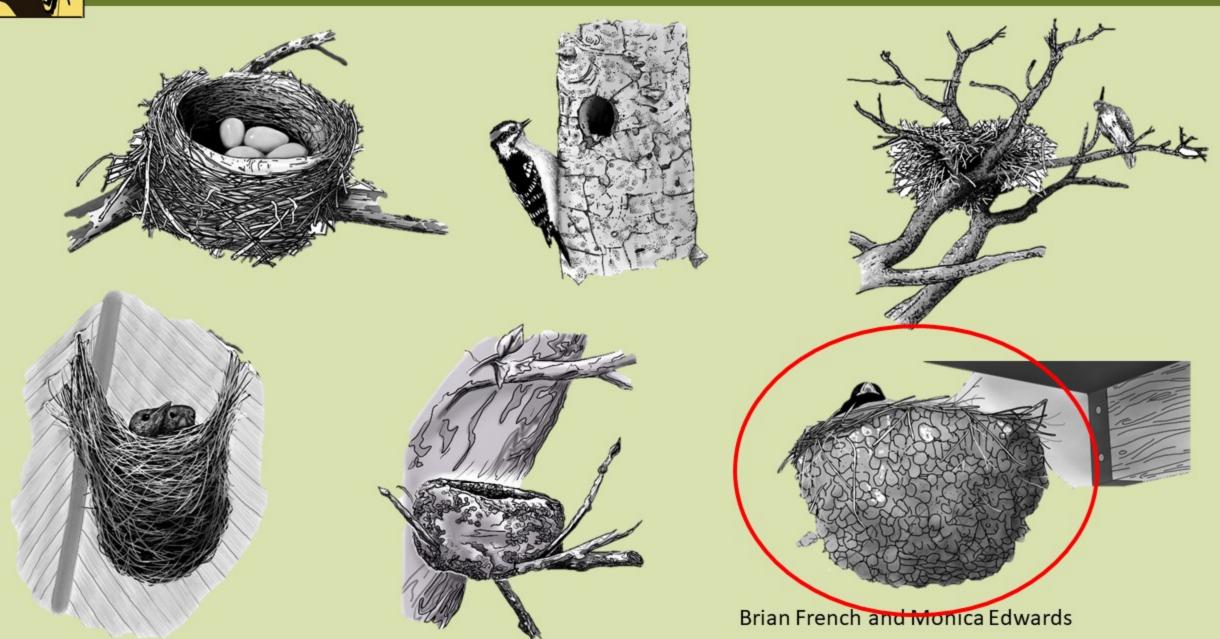








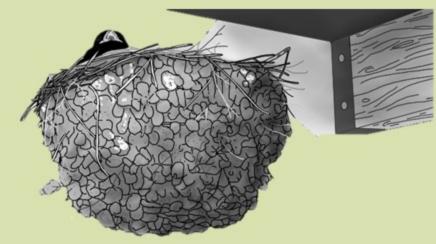






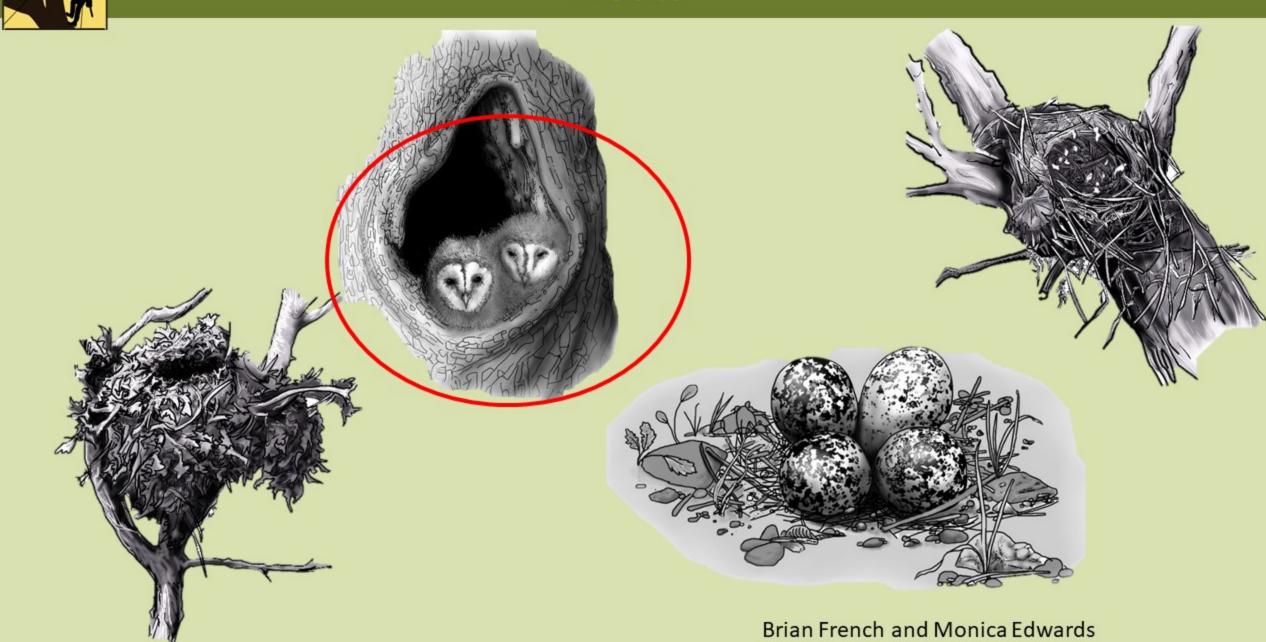




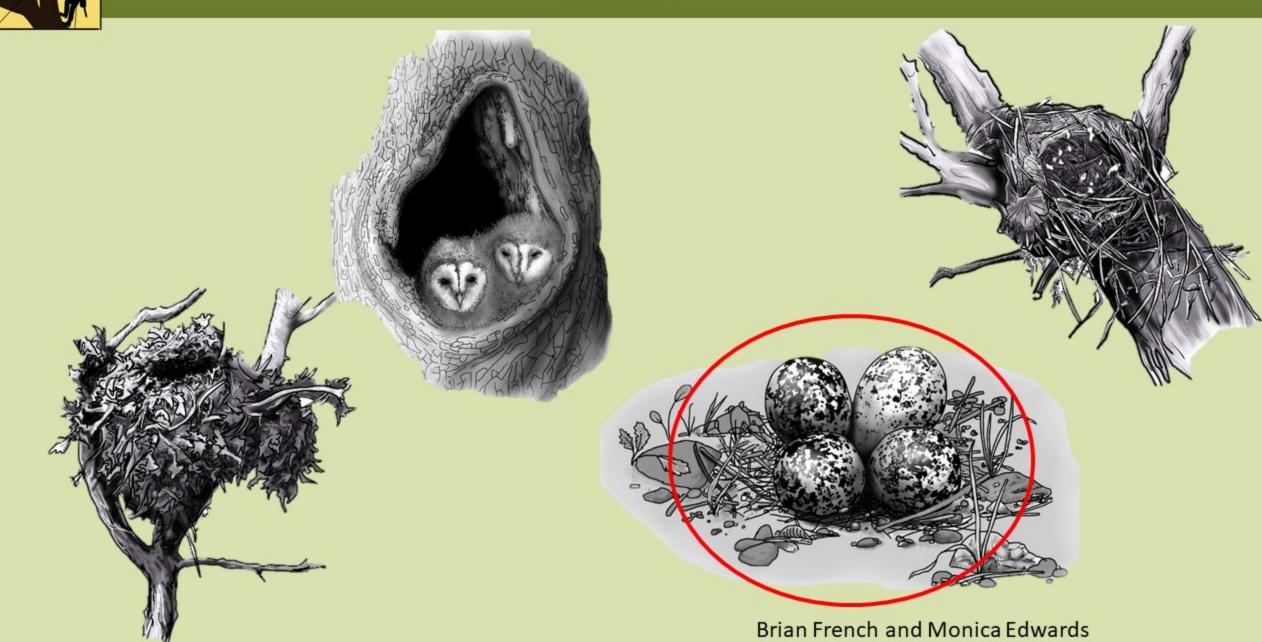


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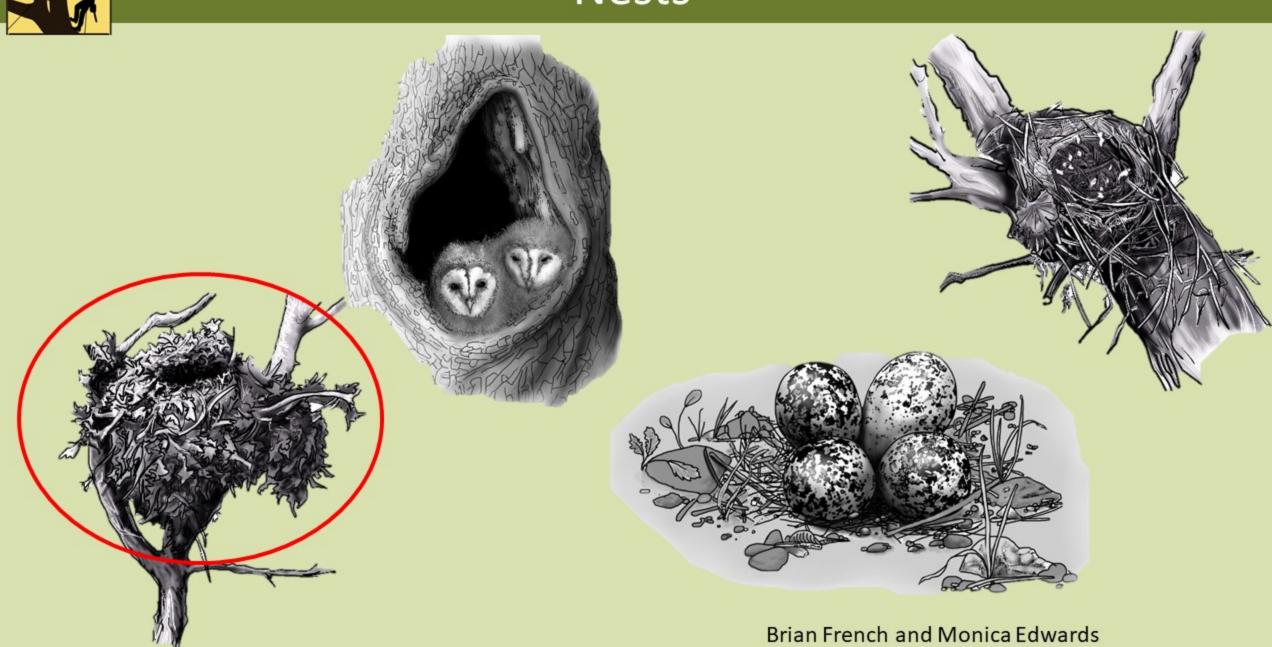




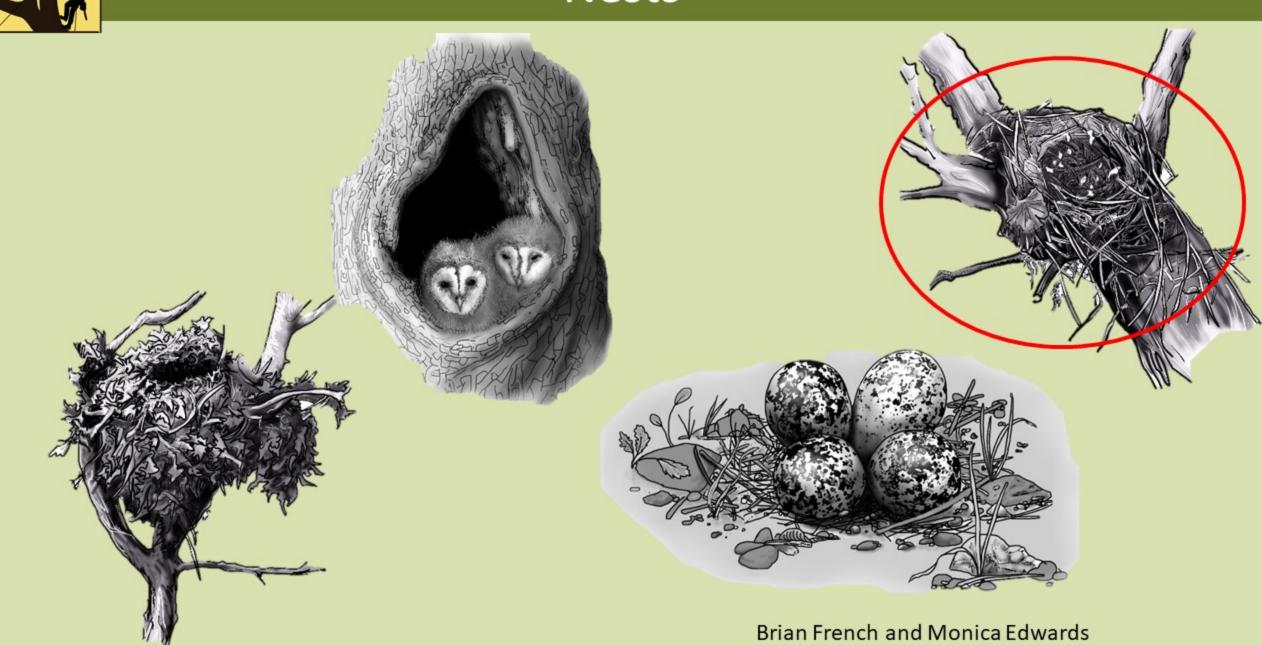














## **Nest Locations**





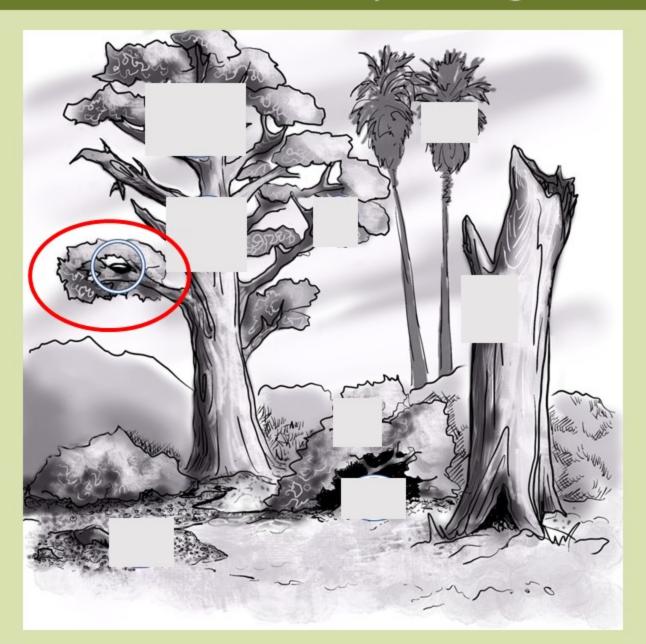
#### If find an active nest

- Stop working near the nest.
- Generally, you can continue working after young have left (weeks).
- Ask advice from someone with more experience, Wildlife Biologist.



House finch









Remove tree or branch with nest

**Clear violation** 





Remove branch in same tree, bush or tree nearby

Possible violation





Remove distant trees

Unlikely violation



#### Other Advice

- Get training.
- Read Best Management Practices and use what makes sense for you.
- Understand laws, buffers, and recommendations for your area and situation.



Red-tailed hawk with nest



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### Emergency

#### **Health and Human Safety**

- Possible to get approval to remove/relocate active nest
- We recommend a level 2 assessment by a Tree Risk Assessment Qualified individual
- Contact Wildlife Biologist
  - Can help if contacting US Fish and Wildlife Service and CA Department of Fish and Wildlife.
  - If no time, consider documenting and taking action, bring wildlife to rehabilitator.



Tree swallow in nest box



### Emergency

#### Wildlife Emergency

- If wildlife are injured or young/eggs are abandoned, call wildlife rehabilitator and ask for advice.
- Nests in trees scheduled for work is not an emergency and should not be removed.



Black-crowned night heron



#### Main Point

 If you find a nest with eggs or young wildlife in it, stop working near it

Ultimately, the person who impacts the nest is responsible

 Can find nesting wildlife anytime, anywhere. Some times and areas are more likely.



Anna's hummingbird



#### Thank You Funders

### Primary funders





Many secondary funders



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### **Presentation Outline**

1.	What training is currently		
available? 2 minutes			

6. The Value of Trees to Wildlife 5 minutes

2. Managing Wildlife Habitat5 minutes

7. How would I use the BMPs?

3. Identifying Protected Birds
4 minutes

8. Does this put too much on the arborist? 4 minute

5 minutes

4. What about non-bird wildlife?

1 minute

9. Do you have a cute hummingbird video? 2 minutes

5. How do I learn about birds?

1 minute

10. So, I have to hire a Wildlife Biologist? 2 minutes



## 1. Current Training



www.simstlc.com/



www.hortscience.com



www.arboriculture.international



# **Current Training**



• 5 or 6 hour course

 Been actively involved in Tree Care for Birds and Other Wildlife



## Current Training



PNW ISA - Brian
 French – Creating
 Wildlife Habitat Trees

www.arboriculture.international



 I co-taught the class in March, discussing with Rose offering for WCISA

www.hortscience.com



## 2. Managing Wildlife Habitat

Is this tree pruned to ANSI A300 Standards?





## 2. Managing Wildlife Habitat

Is this tree pruned to ANSI A300 Standards?

 Removed more than 25%

Heading cuts/Topped

Jagged cuts





 Removed more than 25%

Heading cuts/Topped

Jagged cuts



Removed more than 25%

Heading cuts/Topped

Jagged cuts

- Not in update
- "Pruning operations should remove no more living material than what is necessary to achieve specified objectives"





Heading cuts/Topped

Jagged cuts

 "A heading cut should only be made... to accomplish specific pruning objectives, such as: ...conserving or creating wildlife habitat"





Heading cuts/Topped

Jagged cuts

 "Branches shall be precut when necessary to avoid splitting of the wood or tearing of the bark."



#### ANSI A300 Standards 2017 Revision

#### 3 ways they now include wildlife

- Objective Manage wildlife habitat
- Applicable laws Migratory Bird Treaty Act and Endangered Species Act
- Heading cuts exemption Wildlife habitat



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#### Managing Wildlife Habitat

Is this tree pruned to ANSI A300 Standards?

 Objective – Stop giant sequoia from taking over the house and provide as much wildlife habitat as possible.



Thank you Brian French - Arboriculture International

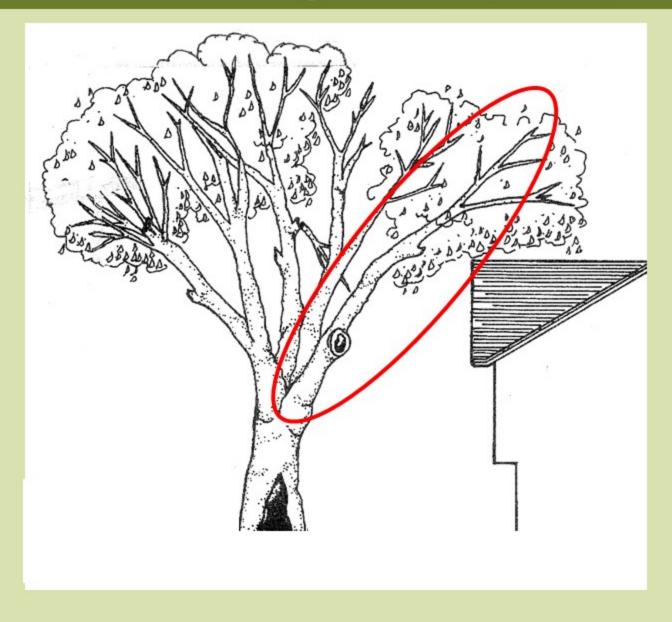


# Managing Wildlife Habitat

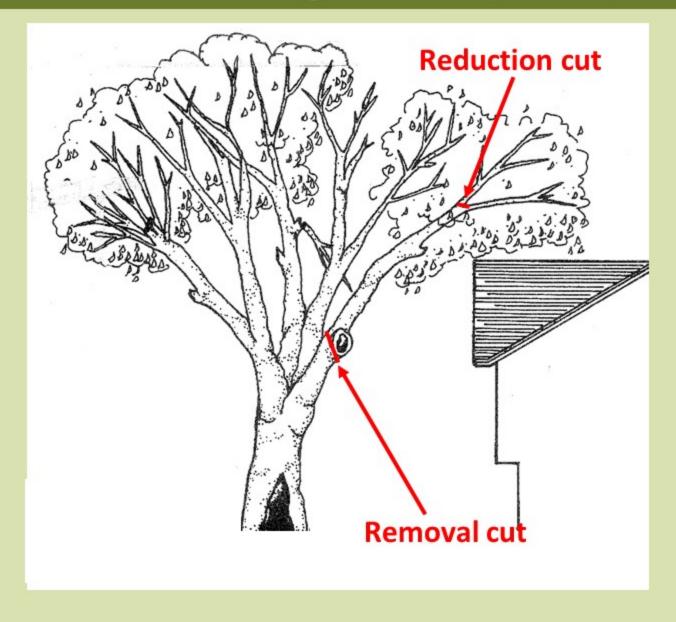
3 Ways that ANSI A300 2017 Standards include wildlife

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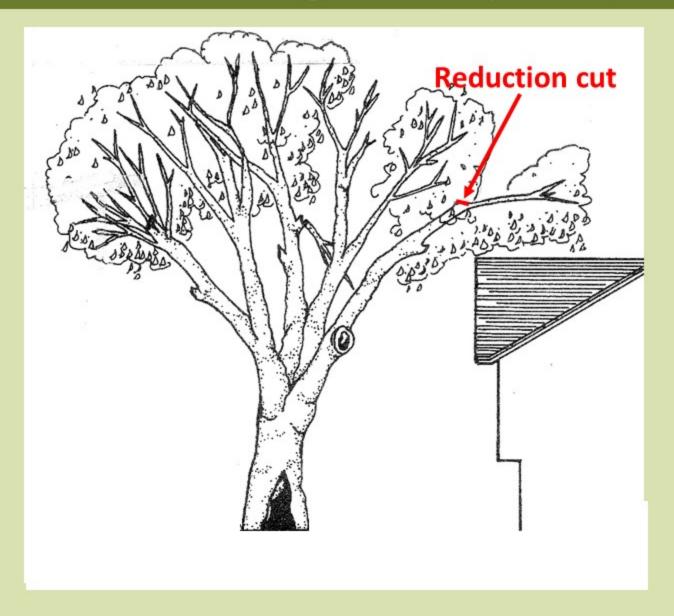




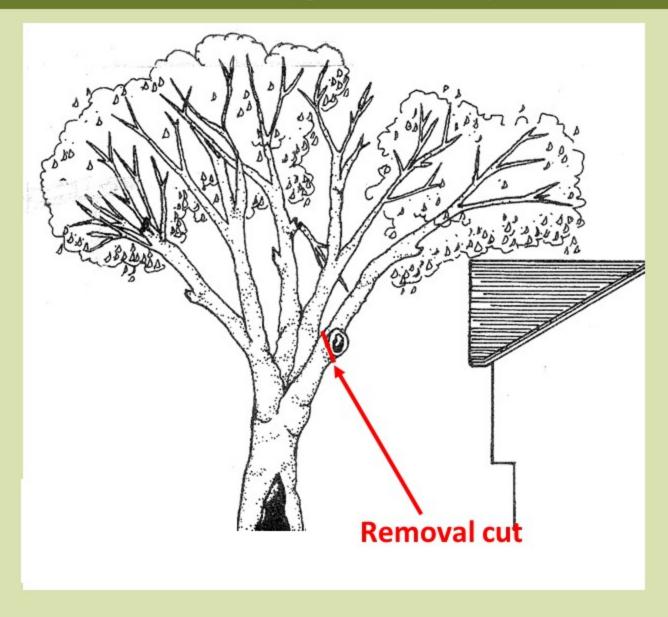




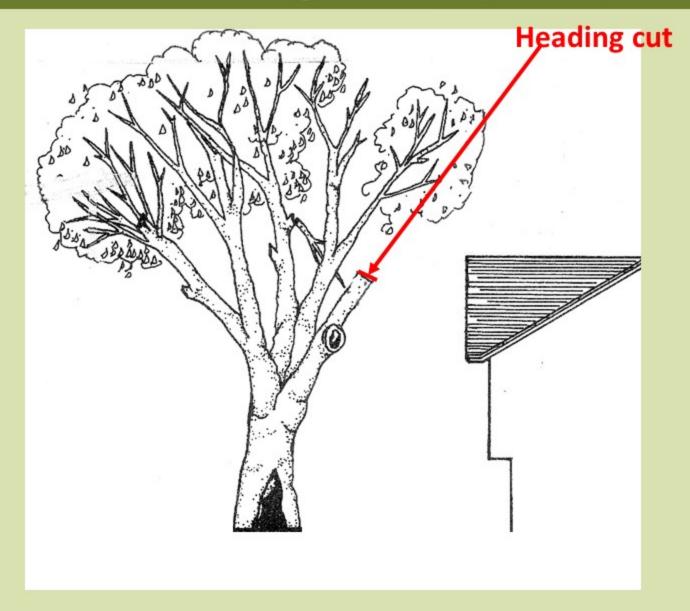




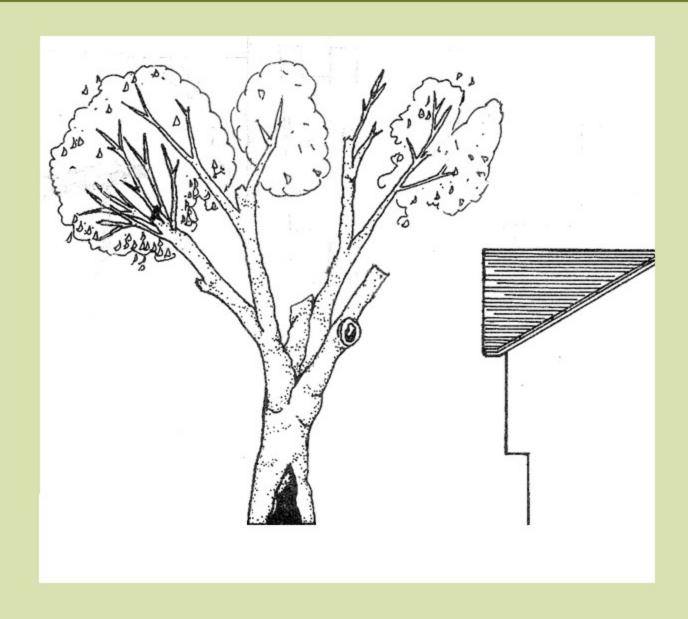




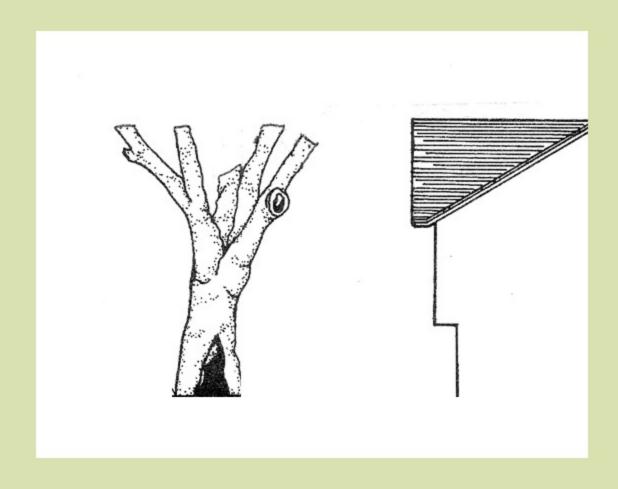












Return



### 3. Identifying Protected Birds

- USFWS lists 1026 bird species protected by the MBTA
  - Non-native not protected
- California has over 350 species
  - CDFW lists 3 not protected



Canvasback







© Don Rash/GBBC



© Beth Graham



Eurasian collared dove - Non-native



Mourning dove - Native



Rock pigeon- Non-native









© Christopher L. Wood



© Jamie Chavez



European starling - Non-native



American crow - Native



© Finiky Brewer's blackbird- Native topher L. Wood



© Jamie Chavez





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© Robert J. Baker.



© Maria Corcacas/PFW.



© Seth Reams

House finch Native



House sparrow – Non-native



© Robert J. Baker.





Rock pigeon-Non-native

Return



#### 4. Non-bird Wildlife

- Mammals
  - Tree squirrels
  - Opossums
  - Wood rats
  - Raccoons
  - Bats
- Lizards
- Amphibians



Tree squirrel nest



#### Non-bird Wildlife

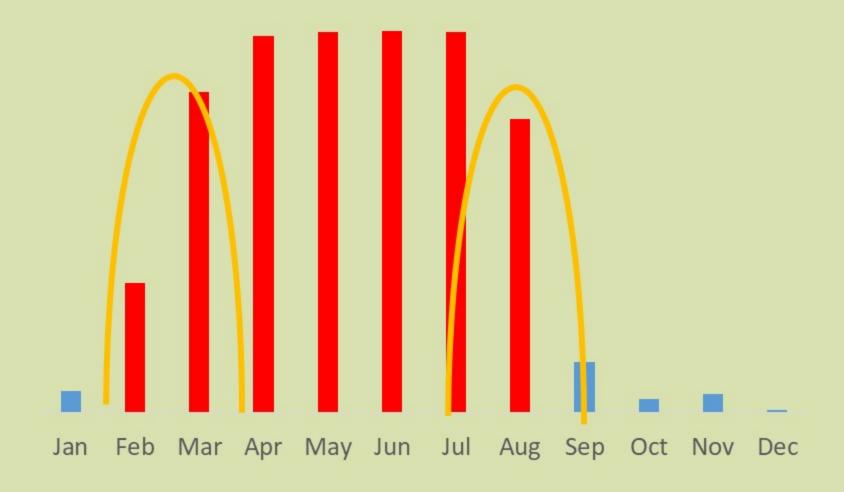
- Not as many regulations
- No MBTA for mammals
  - Animal Cruelty
  - Don't drop from tree, etc.
- Check local laws
- Maybe don't worry about buffers, but don't remove active nests
- Endangered Species
  - Woodrats



Eastern fox squirrel



# Squirrel Breeding Season







#### 5. How do I learn about birds?

- Try to notice them (looks, sounds, habits)
- Your local Audubon walks and classes
- Bird ID books
  - I like Sibley (I have the Phone app)
  - My wife likes Birds of North America
- www.allaboutbirds.com
- Binoculars



Canada goose





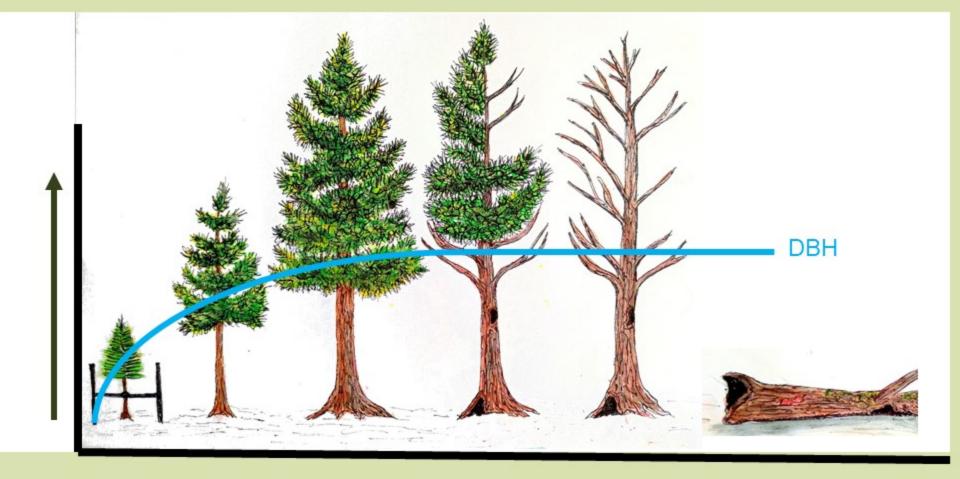
# 6. The value of trees to wildlife



Time



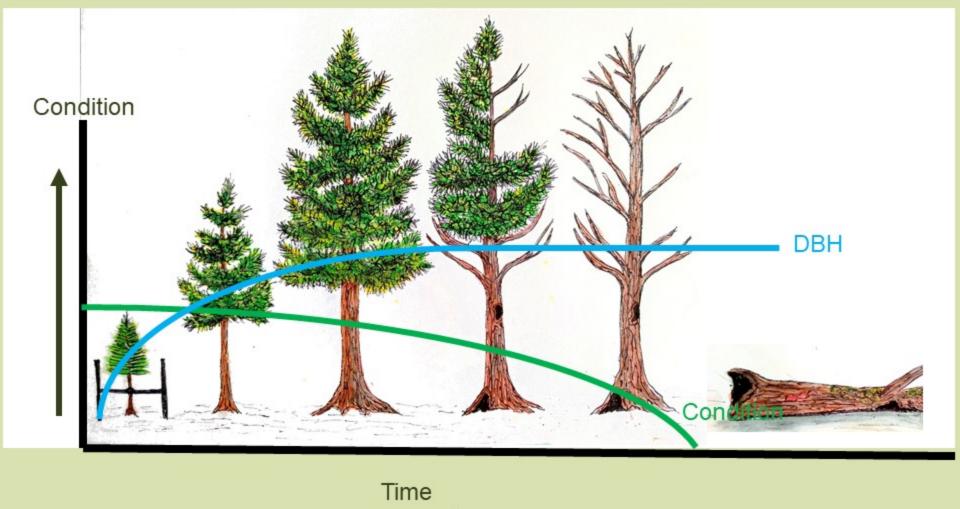
# The value of trees to wildlife







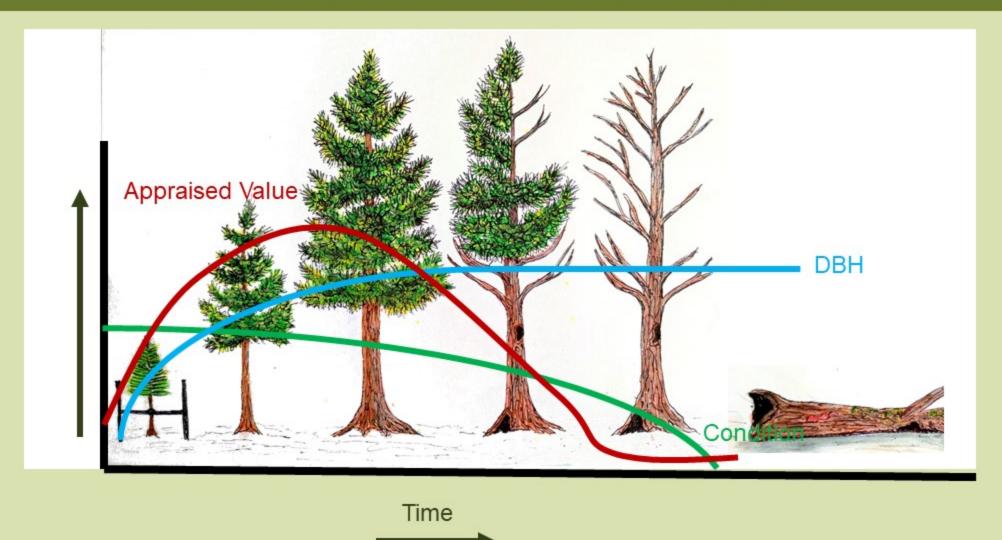
# The value of trees to wildlife







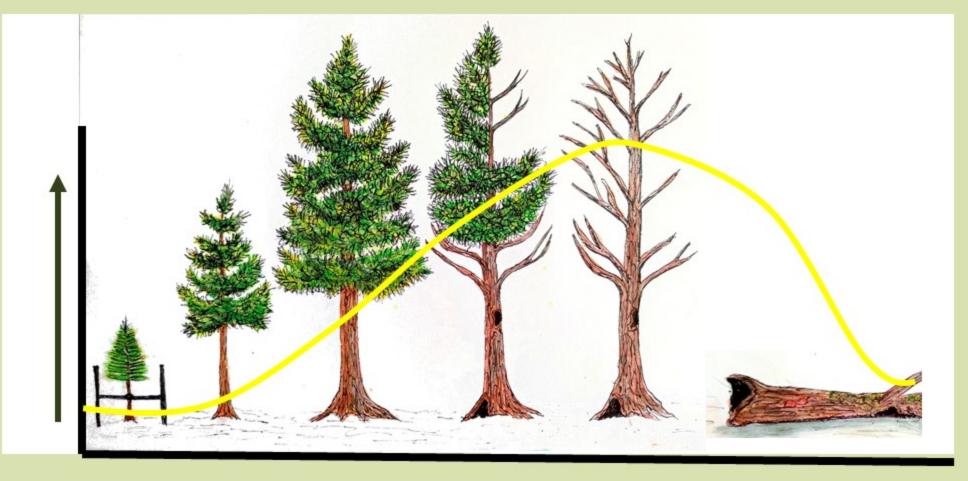
### The value of trees to wildlife



5\*DRH2 \* Condition \* Species Pating \* Location Va

Trunk Formula Method = .785\*DBH2 \* Condition \* Species Rating \* Location Value

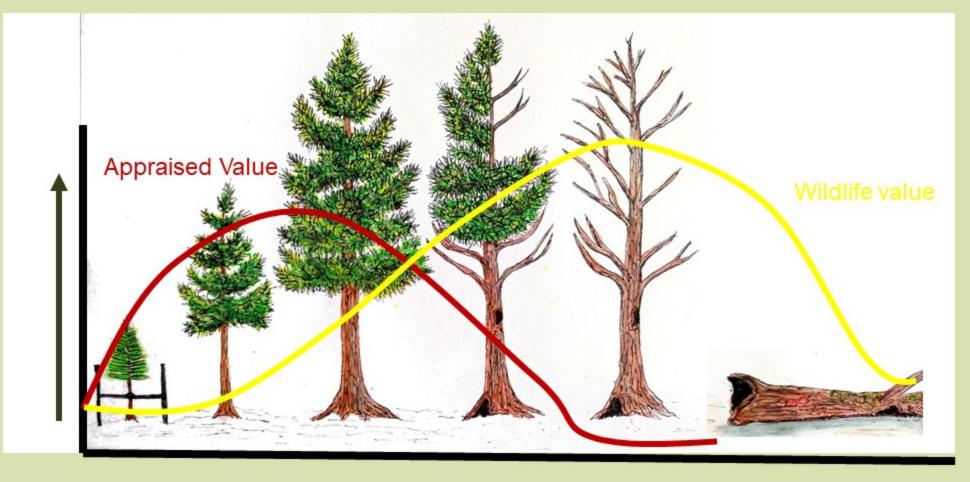




Time

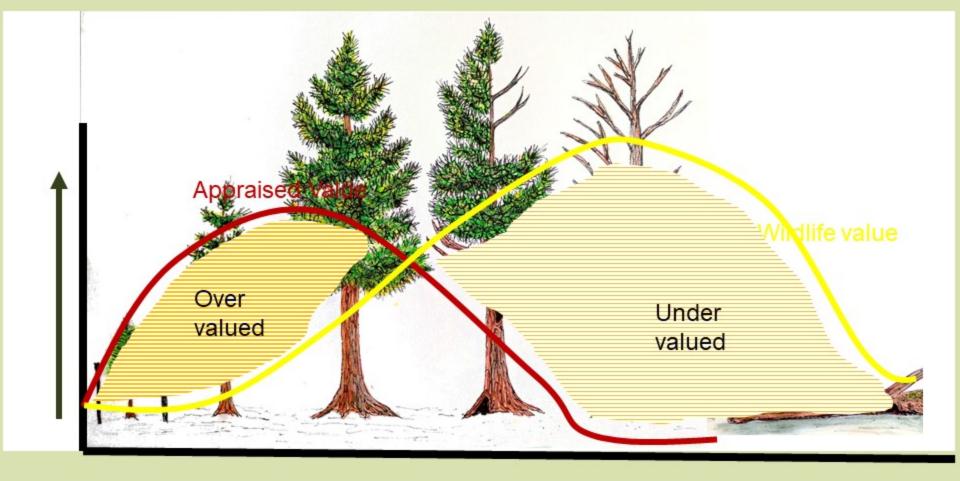
Wildlife value















DATE: 1 March 2017

Mr. Mark Duntemann Natural Path Forestry Naturalpathforestry@gmail.com CTLA ISA Representative

Thank you for the opportunity to provide input on the Guide to Plant Appraisal, 10<sup>th</sup> edition.

In view of the Council's incorporation of the concept of the <a href="ecosystem value">ecosystem value</a> of trees when appraising properties, we would like to pose for your consideration the added but often-undervalued dead tree. Science abundantly substantiates the ecological or "second life" value of such trees. Their removal is particularly impactful to birds that nest in them (about 85 species in North America do so) and to wildlife that rely on them for prey and other benefits. It is reasonable to assume that this is not widely understood by appraisers, and is regrettably overlooked in property transactions, particularly within urban regions.

As your document suggests, in this context a dead tree is customarily assigned no value whatsoever (i.e. Chapter 5 page 18). We would like further consideration of the value of the dead tree and suggest that the value of a dead tree is not and should not be considered 0.





#### 7. How would I use the BMPs?

If I was managing a crew with a large contract (City) managing tree care for a year or more...



Band-tailed pigeon



#### How would I use the BMPs?

Read the BMPs carefully and contact the authors if anything was unclear.

Even outside of California

bmp@treecareforbirds.com



Canvasback



#### All crew members watch and read.





#### Preventing Harm To Wildlife During Tree Care

Almost all bird nests are protected by law. The tree care worker can reduce harm to wildlife, comply with bird regulations, and know how to protect wildlife habitat. Become familiar with the Best Management Practices and other materials at:

www.treecareforbirds.com.

#### Job Steps Affected by this Topic

- Working during the nesting season vs the nonnesting season.
- Preparation before work begins.
- Actions when safety concerns conflict with wildlife regulations.
- · Action when wildlife are accidentally impacted.

#### **Potential Risks**

- · Harming wildlife unnecessarily.
- Violation of bird regulations and possible fines.
- Negative public relations.



Immature songbird by Four Oaks

#### WILDLIFE EMERGENCIES

If you find injured wildlife or an immature bird out of its nest, call a Wildlife Rehabilitation Center before intervening. Parents are highly likely to continue caring for immature birds when they have fallen out of the nest. It is against the law to take a wild bird home as a pet.



#### Crew leaders more training.



www.simstlc.com/



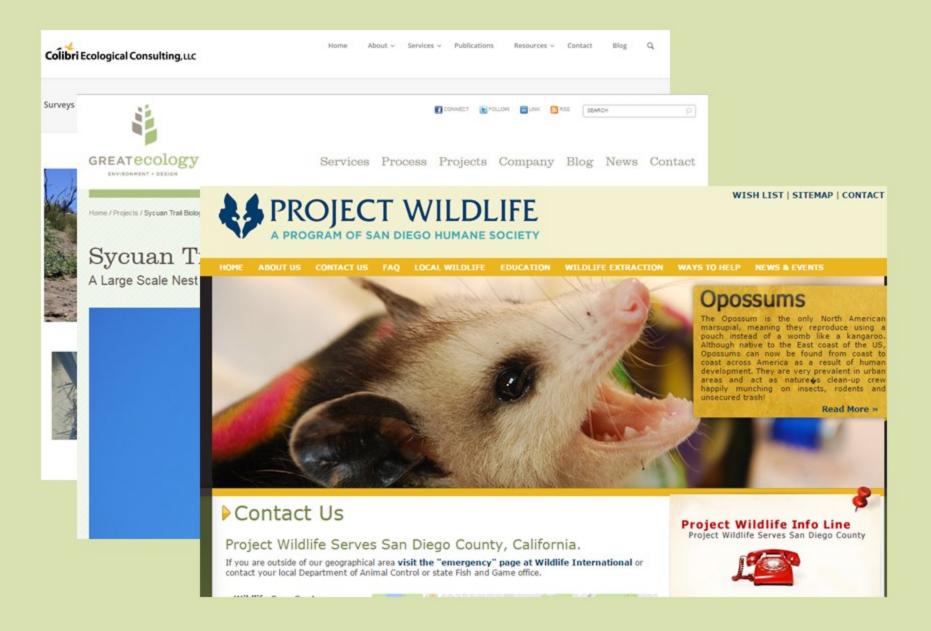
www.hortscience.com/



www.arboriculture.international



### Develop relationship with Biologist and Rehab





#### Perform pre-work inspections

#### Inspection

- Scan the sky, trees, ground, shrubs, and branches.
- Check trunk or branch cavities and holes in the ground.
- ☐ Listen for wildlife sounds.

#### Monica Edwards

Look for wildlife flying or running away.



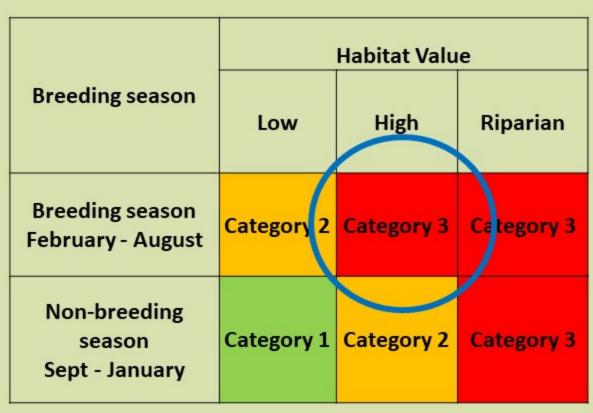
#### Signs of nesting wildlife

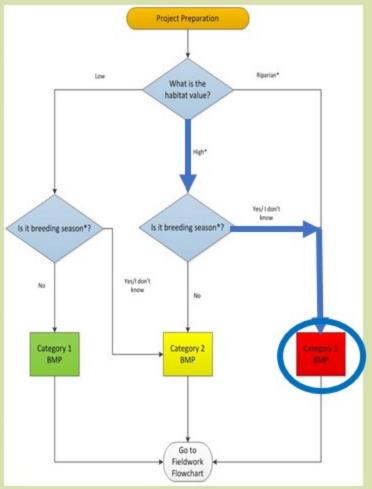
- ☐ Nests that may have eggs or young
- ☐ Concentrations of white colored droppings
- ☐ Wildlife exhibiting breeding behavior
- ☐ Wildlife carrying nesting materials
- ☐ Excessive feces accumulate

Paradise Point - + ree 10	enaral Jeb # 1265-22			
Inspector: Hon Giplo Certification Le Time: 7 Am - 730 Am V Description of work: 3 160 (6000) V Contact for Wildlife Biologist: 558 250 20 V	When is work scheduled: 5/11/17			
Habitat	Value			
Low	High			
High human use	☐ Low human use			
High impervious surfaces	<ul> <li>Low impervious surfaces</li> </ul>			
□ Low plant species diversity	✓ High plant species diversity			
Low plant structural diversity	☐ High plant structural diversity			
☐ Far from water bodies	Close to water bodies			
Few mature, dead and dying trees	<ul> <li>Many mature, dead and dying trees</li> </ul>			
Few/no wildlife present	☐ Abundant wildlife present			
Riparian	Breeding Season			
☐ Within or adjacent to water bodies				
☐ Within or adjacent to dry water channels	□ Non-breeding Season (Sep. 1 – Jan.			
Riparian regetation present	31)			
Categ	gory			
☐ Category 1 🖼 Category 1	ory 2 🔲 Category 3			



### Work in High Habitat during non-breeding

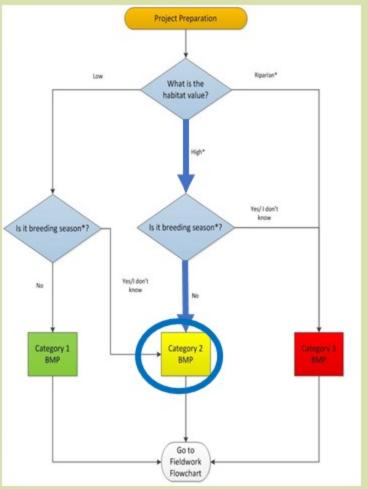






#### Work in High Habitat during non-breeding







#### Establish Risk Tolerance

- How much of an impact can I tolerate to get my job done?
  - Ethically
  - Client/public relations
  - Regulatory agency



Red-tailed hawk with nest



### Find Nest – Delay Work



- ID bird/nest
- Stay buffer distance away
- Estimate
   when inactive
   and re-inspect



## Stay Buffer Distance Away

#### **Appendix IV - Bird Group Breeding Information Table**

Bird Group	Typical Breeding Season	Incubation (Eggs)	Chicks	Buffer LHV (Radius in feet) <sup>1</sup>	Buffer HHV/R <sup>2</sup>
Waders (e.g. herons, egrets)	January through August	19-27 days	21-81 days	200	300
Eagles	January through July	35-46 days	10-11 weeks	Bald 660 feet Golden 0.5-1 mile	Bald 660 feet Golden 0.5-1 mile
Birds of Prey (e.g. hawks, vultures, falcons)	February through August	25-36 days	4-7 weeks	300	500
Doves and Pigeons (mourning doves and band-tailed pigeons)	February through November	14-20 days	13-30 days	100	300
Owls Burrowing owl <sup>3</sup>	January through July February through June	26-35 days	28-60 days	300	500
Hummingbirds	December through July	13-18 days	20-23 days	100	300
Woodpeckers Acorn woodpecker <sup>3</sup>	April through August March through October	11-13 days	~30 days	100	300
Many songbirds (e.g. finches, kingbirds, mockingbirds)	February through August	11-17 days	9-25 days	100	300



### Call if problems/uncertain

- Difficult situation Call wildlife biologist
- 2. Wildlife emergency Call wildlife rehabilitator



Osprey with nest



#### Manage Wildlife Habitat

- Retaining dead, dying trees when possible
- Inspection cycle not pruning cycle
- Increase under represented habitats
- Diversify habitats



Tree swallow in nest box





- 1. Don't the wildlife BMPs and your recommendation to do a pre-work inspection put additional responsibility on the arborist that was not there before?
- 2. Isnt it the land owners'/managers' responsibility to ensure that nesting wildlife are not present prior to starting work?



Mountain bluebird



- 1. Don't the wildlife BMPs and your recommendation to do a pre-work inspection put additional responsibility on the arborist that was not there before?
- 2. Isnt it the land owners'/managers' responsibility to ensure that nesting wildlife are not present prior to starting work?



Mountain bluebird





Damian and his crew were great! They cleared brush and trimmed oak trees on our one and a half acre lot. He did exactly what he promised and came in very close to the estimate. Our property looks fantastic. Damian and his crew showed so much care to avoid **bird** nests in the trees. Tree Surfers definitely won us over and the before and after photos he sent were impressive not to mention how much safer our property is now from fire.

Was this review ...?







Cool



This is the worst landscape company possible, even imaginable. The company was hired by our condominium homeowners association. Here are only a few problems we have with TLC:

 TLC landscape workers, and their tree workers, do not check for birds nests before they over-trim hedges and trim or remove large trees; their workers say checking for birds nests is not necessary because "most nests are just squirrels";

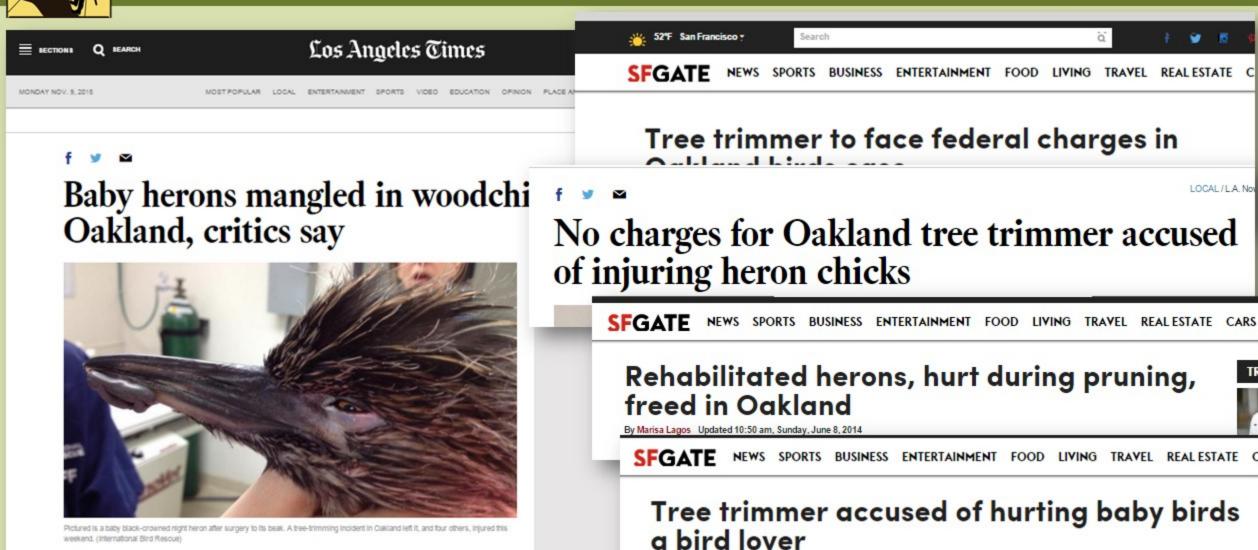


My conversation with California Department of Fish and Wildlife...

"Ultimately the one impacting the nest is the one responsible."







By Carolyn Jones Updated 6:41 am, Friday, May 16, 2014

A 📮 21



- 1. The public and regulating agencies think that it is our responsibility.
- 2. Some arborists are getting in real trouble with MBTA and other laws.

- arborists are making tough decisions with wildlife
- we provide them information about how to do it responsibly.



American robin



- 1. Don't the wildlife BMPs and your recommendation to do a pre-work inspection put additional responsibility on the arborist that was not there before?
- 2. Isnt it the land owners'/managers' responsibility to ensure that nesting wildlife are not present prior to starting work?





# Yes!



Yes!, but...



- 1. Who will the public and law enforcement blame if there is a problem?
- 2. What if it wasn't done or wasn't done well?

- This responsibility is already on us
- denying that responsibility wont do us any good.
- We don't want to get anyone in trouble;
   trying to keep people out of trouble



Wood duck



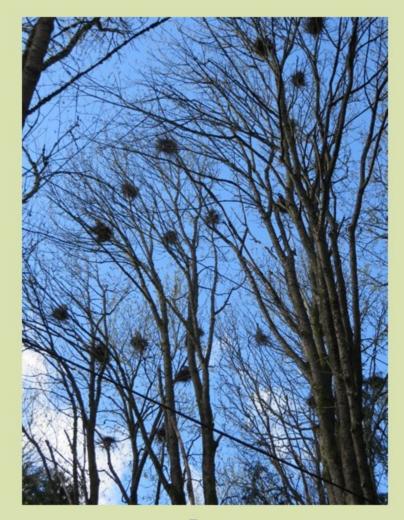
# 9. Cute Video of Hummingbird





### 10. So I have to hire a Wildlife Biologist?

- 1. Wont need Wildlife Biologist very often
- 2. I recommend forming a relationship with when for when you have problems.



Egret nests



## So I have to hire a Wildlife Biologist?

	Habitat Value			
Breeding season	Low	High	Riparian	
Breeding season February - August	Category 2	Category 3	Category 3	
Non-breeding season Sept - January	Category 1	Category 2	Category 3	

	Habitat Value			
Breeding season	75%	20%	5%	
50%	35%	10%	2.5%	
50%	35%	10%	2.5%	



#### So I have to hire a Wildlife Biologist?

#### In BMPs:

- Never says shall
- Never says have to
- No formal authority
- Helps arborists stay out of trouble
- Specifically states that if you have a better way, do that.



Mourning dove



#### So I have to hire a Wildlife Biologist?

#### Probably a good idea if:

- Important timeline in high habitat area
- Need to work near an active nest
- Health and human safety emergency
- Working in riparian areas



# Wildlife BMPs for Tree Care





California Urban Forests Council
Annual Conference
Life Among the Leaves
August 24, 2017

Ryan Gilpin
HortScience
ryan@hortscience.com
bmp@treecareforbirds.com