



Bird Houses Project for Bastrop Public Library and Other Locations

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Approach and Goal

- **Goal: installing bird houses at the Library provides education opportunities and shows relevance of the Library**
- Collaborative effort between the Bastrop Public Library, City of Bastrop, and *Lost pines Garden Club*
 - Compliment other projects/initiatives (e.g., at Fisherman's' Park)
- Have publicity for these birdhouses and the purpose as part of protecting wildlife and the environment
- Assess results and next steps
- *Lost Pines Garden Club* (ideally with other groups) maintains the houses such as checking at least twice a year
- Birdhouses will weather and eventually need replacement for a limited cost and time

This project is not complex or expensive, benefits birds and people, sustainable, and could be replicated almost anywhere

Summary of Bird Houses for Bastrop Public Library and City of Bastrop: **Can be Replicated Elsewhere**



- A public service project for public spaces such as Bastrop Public Library and city parks
 - **Support of protecting the environment and education**
- Provide houses for birds native to or migrating through our portion of Central Texas
 - Support “our winged friends”
 - Help maintain a natural environment in rural or suburban areas
 - Provide supplemental shelter for wildlife (e.g., native birds) while discouraging predators
 - Houses are available for songbirds (Texas Bluebirds, etc.), ducks, or bats
- Install two Bird houses at Library
 - More could follow
 - Document, maintain, and possibly use cameras for education and to show progress
- Complement the project completed for “bird Houses at Fisherman's Park” by *Rotary Club of Bastrop County*
 - Later locations might be Bob Bryant Park, Mayfest Park, and/or Bastrop City Hall
- Do periodic checking and cleaning to maintain houses and assess results
- Optionally install “Bird box camera(s)” and allow remote viewing by Library patrons or from anywhere (e.g., EarthCam)

Bird Houses at Bastrop Public Library

- Installed Dec 2023
- Both bird houses are Bluebird type
- Bird house #1 planned to have a nest camera



Advanced Bird Houses at Bastrop Library With Nest Camera

- Installed April 8, 2024

Design based upon "Texas Bluebird Society to encourage desirable birds (Bluebird, Chickadees, etc.) and discourage undesirable birds and predators"

Bluebird type house installed Dec 2023



Nighttime view of interior: IR not visible to birds or humans



- Wasp/bee screen
- WiFi camera for nesting monitoring
- Solar plane for camera
- Predator guard with logos of organization, Bird City Texas, etc.

10' T post for installation and limit tampering (snake netting is optional)

Location marking by GPS (GPS Compass App)



1100 Chestnut St, Bastrop, TX 78602, US
Latitude: 30.111293° Longitude: -97.32201
LOCAL 10:42 AM MONDAY 04.08.20
GMT 03:42 PM ALTITUDE 282 FEET

“Bird Houses” Installed at Fisherman's Park and Bastrop Library

- Houses by Bastrop Rotary Club for “Birds” (e.g., Bluebird or similar), “Bat”, “Owl” and “Duck”
- Add the houses installed by Garden Club Dec 2023 at the Library



Bird Houses Installation at Bastrop Library Dec 19, 2023



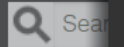
Materials List and Budget

	A	B	C	D	
Materials for Houses for Native Bird, Wood Duck, bat and owls					
Item	Cost	Quantity	Total		Sou
Bird house: Texas Bluebird Society style	\$25.00		\$0.00		Stur
Bluebird with camera modification, paint	\$40.00	1	\$40.00		
Wood Duck house	\$30.00		\$0.00		Stur
Bat house	\$30.00		\$0.00		Stur
Owl box	\$50.00				
T post, 8' or 10' (Parks)	\$11.00	1	\$11.00		
T post bracket	\$5.00	1	\$5.00		Ame
4" PVC pipe for stovepipe predator guard	\$3.50	1	\$3.50		Low
Snake netting for predator guard (option	\$1.00				
4" PVC cap for predator guard	\$3.67	1	\$3.67		Low
Fiberglass screen for wasps	\$1.00	1	\$1.00		
Signs/label	\$3.00	1	\$3.00		777:
NWF sign	\$12.00		\$0.00		
Sign for post 8X10 nine per 24x30 sheet	\$2.56	0.5	\$1.28		Sign
		TOTAL	\$68.45		
Camera for bird nest	\$40.00	1	\$40.00		Ame
Bolt and nut, 1/4-20 stainless	\$1.00	1	\$1.00		
Camera for outside	\$51.00				Ame
		TOTAL	\$41.00		
			Total with camera and tax	\$119.30	

Planned Bird Houses Support Bastrop “Bird City Certification”



- Parks
- Hunting
- Fishing
- Boating
- Game Warden
- Activities
- Wildlife
- Land
- Water
- Media
- Calendar
- Regulations
- Education
- Volunteer
- More...



Bird City Texas

- About
- Resources ▾
- FAQ
- How to Apply
- Contact Us



Bastrop: Bird City Texas Certified Community

Learn more about the excellent work being done in Bastrop to involve their community, improve habitat, and create safer spaces for birds. Below you will find some details about Bastrop as well as a few examples of the local bird-friendly initiatives they have implemented that led to their Bird City Texas official certification. This list is not exhaustive but hopefully helps give insight on what local communities are doing to support birds and the spaces where they live. We hope these examples help you discover ways your community can work to protect birds and their habitat where you live.

Details

Bastrop Details



Example of Bird House with Predator Guard and sign

- Illustrates configuration with “Native bird house” (e.g., Bluebird)
- Duck house, Bluebird house would be similar
- This is mounted on a 6’ T post
 - 8’ on public parks for nest security
- Owl and bat houses mounted high on poles



Texas Bluebird Society Style Birdhouse

- www.texasbluebirdsociety.org/BuildingPlans.php
- Has swing out door for checking and periodic cleaning
- Made of pine glued up boards
- Paint exterior with light color paint
- Label using “exterior vinyl sticker”
 - Simple, inexpensive, and flexible on design
- Optionally could be modified to accommodate a “Bird nest camera”



Bird Houses for Fisherman's Park and Bastrop Library

- Install on poles (e.g., T posts)
- Install guards for predators such as squirrels, racoons, snakes
- Check and clean every few months
- Some weathering is expected but plan to replace in approximately 4 years



Native songbird (e.g., Bluebird), Wood Duck, Bat houses, Owl



Wood Duck house approximately 3 years old and still functional

Sign for Bird Houses

- Sign to summarize aspects
- Mount on “predator guard” on 8’ T post
- 8”x10” outdoor vinyl sticker

8”x10” for predator guard



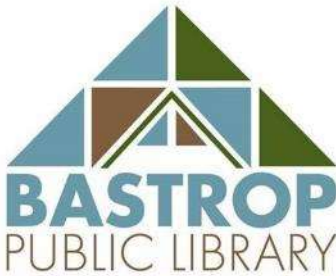
Lost Pines Garden Club

www.LostPinesGardenClub.org



Gardeners helping Gardeners

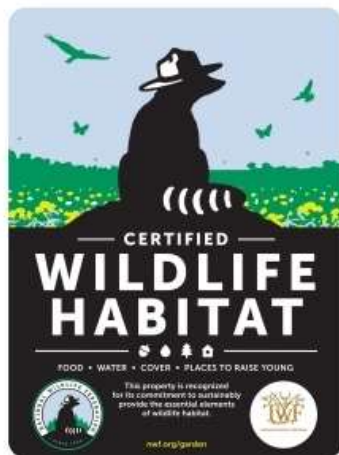
Serving our community and nature



Certified Wildlife Habitat for Parks, Libraires, Churches, etc.

www.nwf.org/CertifiedWildlifeHabitat

The **NWF program** certifies wildlife-friendly land for homeowners, businesses, schools, universities, places of worship, parks, and community-based organizations as community wildlife habitats.



- It is also possible to have a specific area such as a park get this recognition rather than a entire city
- This can be simpler



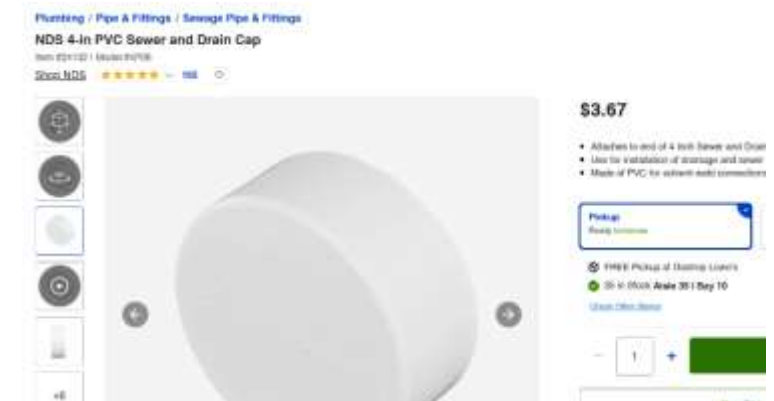
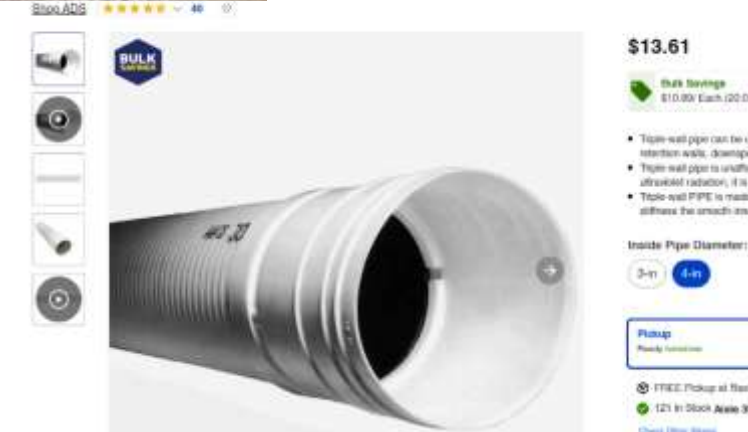
Cameras and Nest Cameras

- Support a Library mission which is education and community support
- YouTube <https://youtu.be/k6mbIJZ4SIA> and <https://youtu.be/n7Hqa6JNO1Q> Nest Camera video



Predator Guard

- Predator guard is based on “Stovepipe” design to deter predators (snakes, racoons, squirrels, etc.)
- Use 4” plastic pipe
 - Cut 10’ pipe into five 2’ guards
- Cap mounts on top of 4” pipe
 - Cut appropriate opening for T post using drill and oscillating saw
- Stainless steel hose clamps on T posts prevents guard sliding down



Bracket for Mounting of Bird Houses to T Posts

Very sturdy



Wuno Shop T Post Brackets , T Post Target Hanger, Fence Bracket for T Shape Fence Posts, T Post Corner Brace for Posting Signs, Trail Camera Mount, Bird House Feeder, Mailbox -6 Pcs

Brand: Wuno Shop

Price: \$30.99 ✓prime

Coupon: Apply 10% coupon [Shop items >](#) | [Terms](#)

Earn 5% Back on this purchase when you pay with your [Amazon Business Prime American Express Card](#).*

*On Amazon Business U.S. purchases with an Prime membership. Terms and cap apply.

Color metal

Brand Wuno Shop

Item Dimensions LxWxH 1 x 1 x 1 inches

Roll over image to zoom in



About this item

- T Post Target Hanger: Not only are these T-post brackets great for posting signs, the fence post brackets for wood steel is thick and has plenty of mounting holes, making it perfect for mounting brackets for steel shooting targets.T-posts last longer than any wood post, and the t shape post bracket can be

Wireless WiFi Camera for Remote Monitoring and Viewing

- Camera could be used for monitoring and remote viewing of Bird houses
- Cameras are readily available and inexpensive
- Can you used for outside view
- Pictures and/or videos can be shown live and saved as files
 - **Show archived pictures or videos on a City and/or Library web site**



 **REOLINK Argus Eco+SP - 2K Solar WiFi Security Cameras Outdoor Wireless, No Hub Needed, 3MP Night Vision, Human/Vehicle Detection, Solar Powered Wireless Home Security Camera Works with Alexa**

Visit the REOLINK Store
4.1 ★★★★★ 8,267 ratings | Search this page

Amazon's Choice in Bullet Surveillance Cameras by REOLINK

500+ bought in past month

-25% **\$63.99**
Typical price: \$84.99 @

Or \$10.67/mo (6 mo). Select from 2 plans





 **Allweviee Solar Security Cameras Wire Outdoor, 2K 3MP Pan Tilt 355° View II Waterproof Rechargeable Battery Pow PTZ WiFi Camera with PIR, Color Night Vision, 2-Way Talk, Cloud/SD**

Visit the Allweviee Store
4.4 ★★★★★ 1,037 ratings | Search this page

Amazon's Choice

No thought to your month

Low Price: **\$129.99** Details
Wired Price: **\$49.99** **30% off** **Free Shipping**
Free Returns

You Save: **\$80.00 (62%)**

Estimate Power usage

Important:  \$7 coupon applied to one item per order at this shop. Terms: [View Terms](#)

Get 1% Back on this purchase when you pay with your Amazon Bank American Express Card™

See more details & reviews with wireless connectivity. Network cap apply.

Buy 4 or more 10% off | [Apply](#) **Prime Member**

A Promising Camera for “Bird Nest Camera”

Bonus is the sounds of birds (including in the nest) can be heard



FOAOOD Security Cameras Wireless Outdoor - Solar Cameras for Home Security & Battery Camera Wireless with Color Night Vision Human Detection 2-Way Talk IP67 Waterproof Only 2.4G WiFi

Brand: FOAOOD

4.3 ★★★★★ 7,711 ratings | Search this page

1K+ bought in past month

Typical price: \$59.99 Details

Prime Price: **\$39.99** ✓prime Same-Day

FREE Returns

You Save: **\$20.00 (33%)**

Exclusive Prime price

Coupon: ✓ \$15 coupon applied to one item per order at checkout

[Shop items >](#) | [Terms](#)

Earn **5% Back** on this purchase when you pay with your **Amazon Business Prime**

American Express Card.*

Built-in 5000mAh Large Battery
It will last at least a month of use even without any sun.

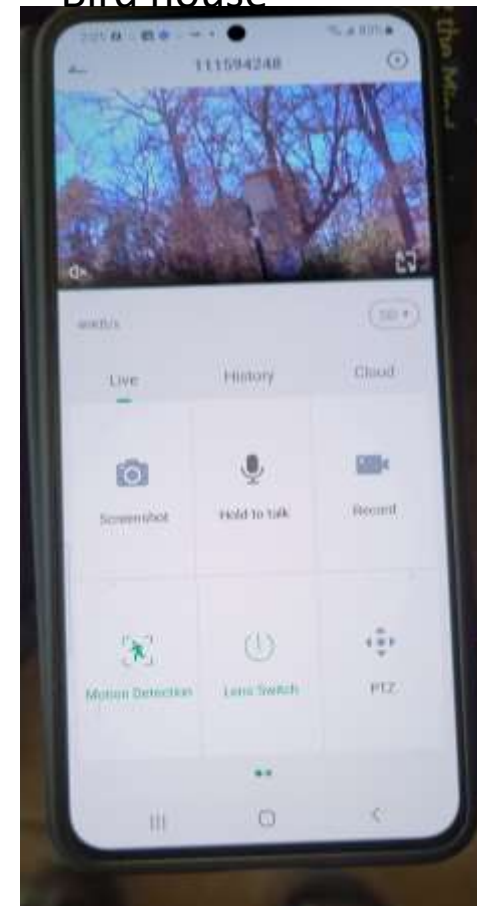


Example Images of Bird House and Bird Feeder Using Wireless IP Camera

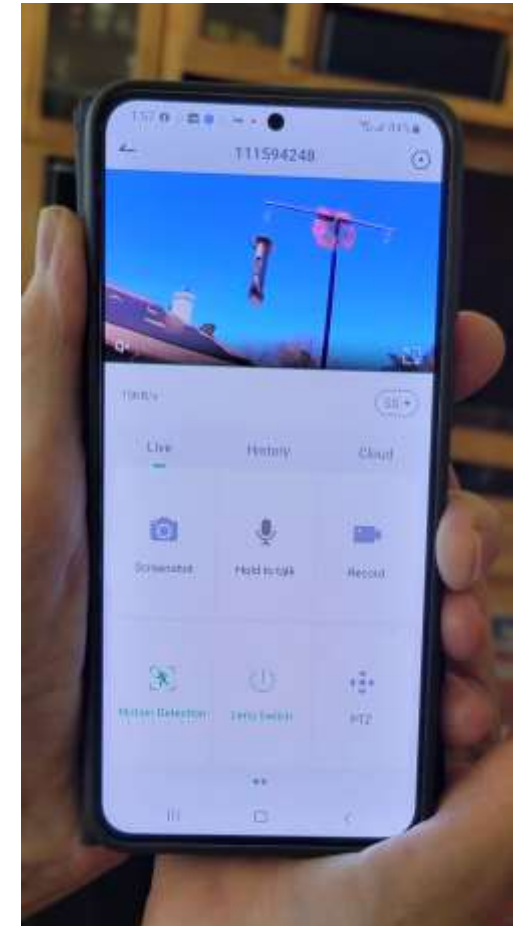
Used wireless camera and solar cell/battery
Snapshot picture using IP camera and App



Picture of cell phone image using an IP camera and App
Bird house

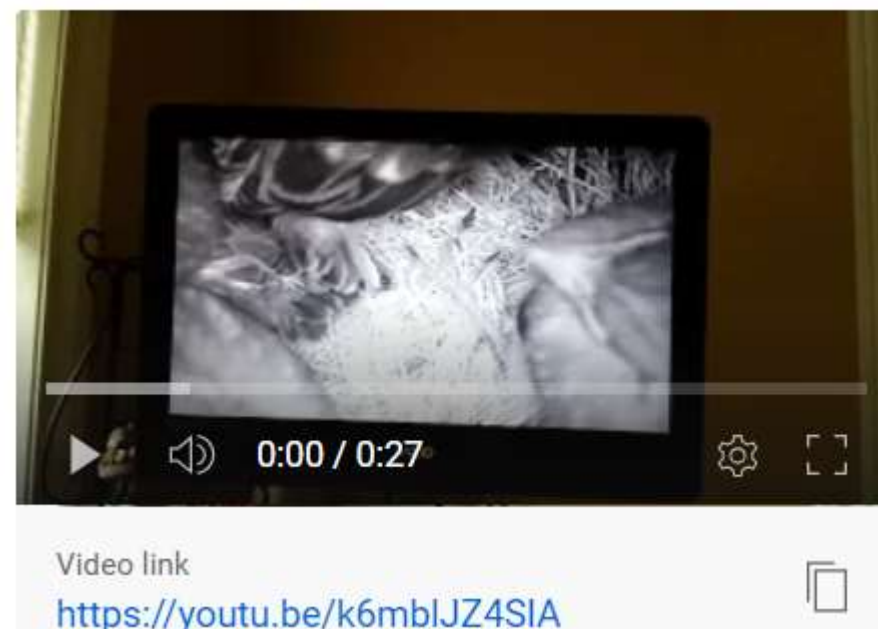


Bird feeder



Examples of “Bird Box Nest Camera” Videos

- Can be very interesting
- <https://youtu.be/n7Hqa6JN01Q> and <https://youtu.be/k6mbIJZ4SIA> from Jones house



Wasp Screen and Source of Light

- Adding insect screen to ventilation openings at top of box may deter wasps
- Adds some sunlight to inside bird house
 - Adds daylight for color pictures and videos on Bird nest camera
 - Birds need to deal with sunlight and other challenges anyway so some light from a window should not be an issue
- Process: cut rectangle of window screen to cover opening

[← Back to Results](#) / [Windows & Doors](#) / [Replacement Screens](#)

M-D Small Bug 3-ft x 7-ft Charcoal Fiberglass Screen Mesh

Item #1175779 | Model #14151

\$10.28

Prototype of Bird Box Nest Camera

- Used FAODOO camera with WiFi and solar panel
- Camera would be inside on clear plastic floor and pointed down
- Bird box would be 3" taller to accommodate the camera

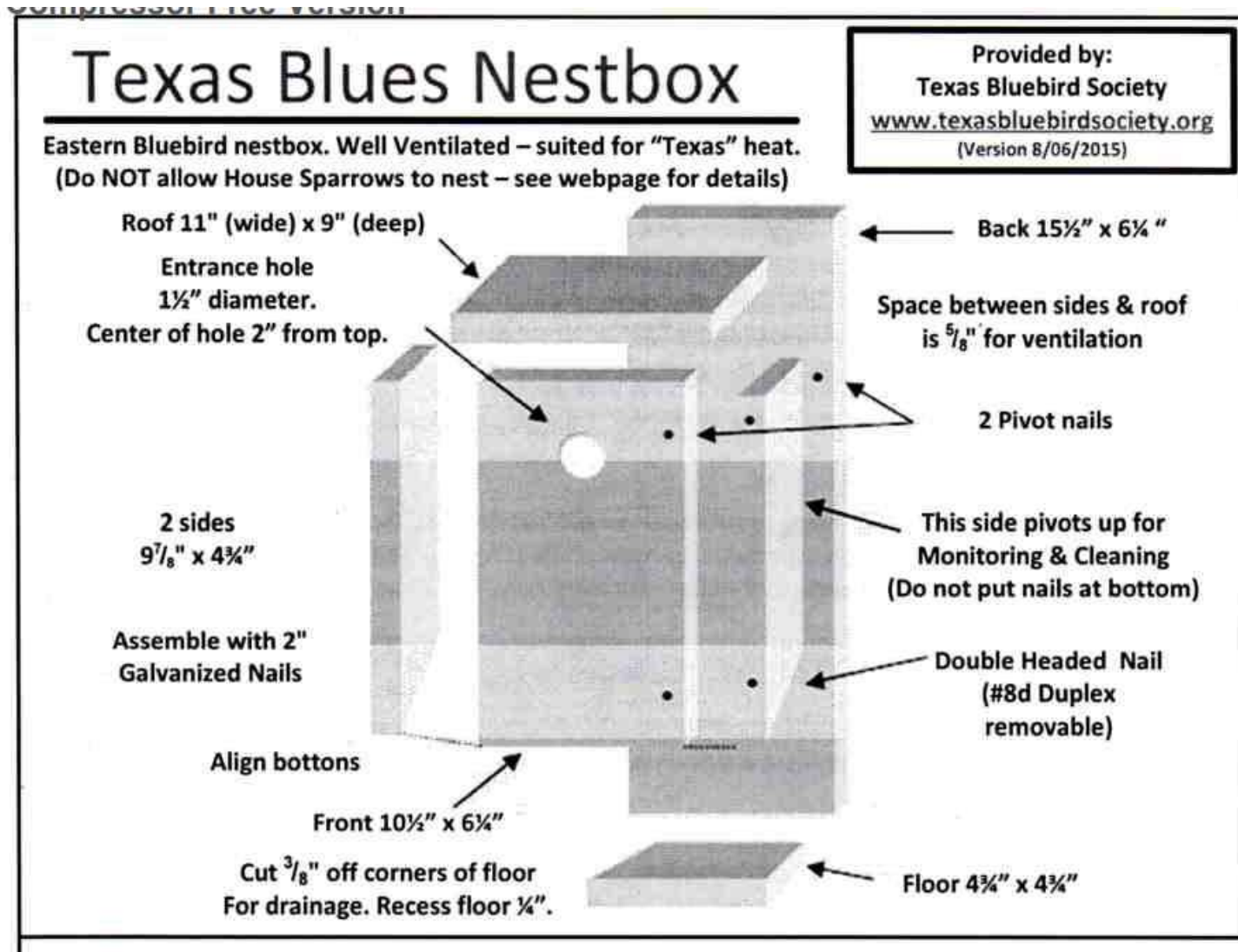


Bird Houses Installed at Bastrop Public Library

- Installed by Lost Pines Garden Club in Dec 2023 in cooperation with the Bastrop Library and the City of Bastrop
- Video <https://youtu.be/1EpPbOsQ388> showing the two houses and the Library

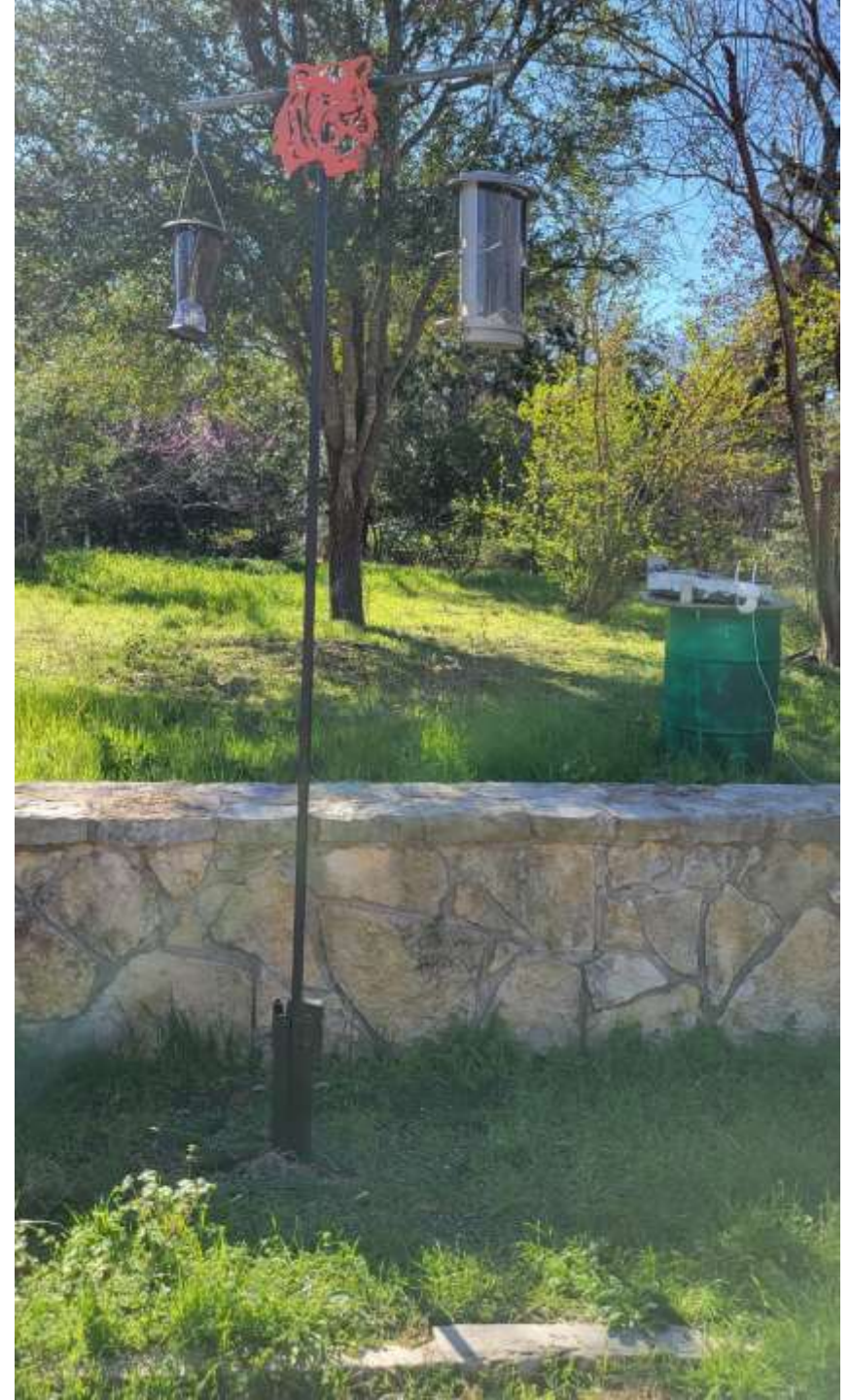
Modified House for Bird Nest Camera

- Increase height by 3" and width by 1" to accommodate camera inside house pointed down
 - Camera is 2.5" high
- Install insect screen on ventilation spaces
- Make ventilation space 1" to allow light



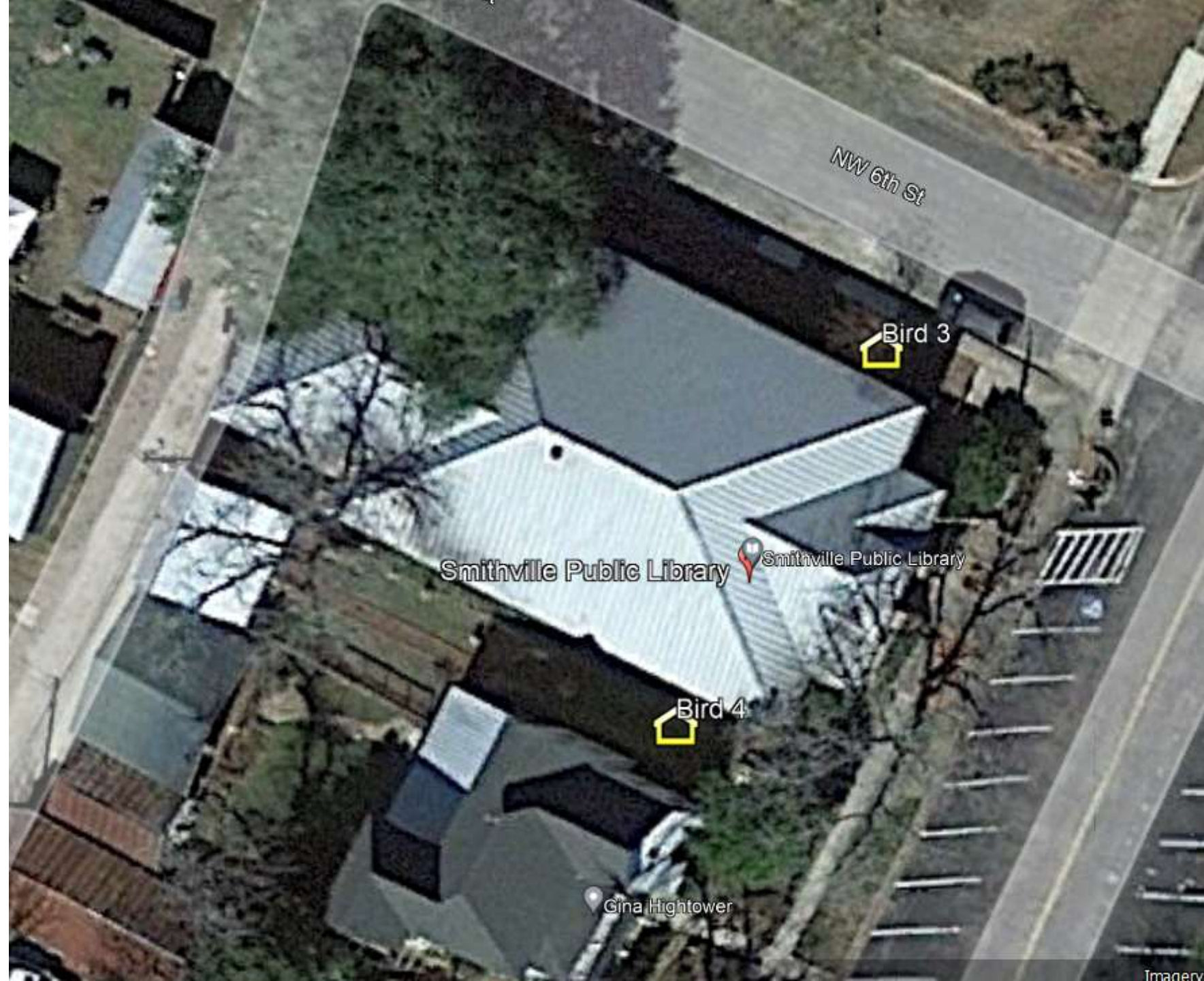
Bird Feeders (optional)

- Can attract and support birds
- Does require refilling (e.g., Sunflower seeds)
- Picture is from Jones house with two feeders and mounting pole made at a local high school
 - Attracts and supports a large quality of birds
 - Has pivot mechanism to simplify refill process



Proposed Bird Houses at Smithville Public Library

- Installed at Rec Center
- Both bird houses are Bluebird type
- Bird house #1 will have a nest camera



Proposed Bird Houses at Lake Jackson Public Library

- Both bird houses are Bluebird type
- Bird house #1 will have a nest camera
- Good WiFi at both locations

