

Tennessee's Wildlife Observation Area Program

Robert M. Hatcher, *Tennessee Wildlife Resources Agency*,
P.O. Box 40747, Nashville, TN 37204

Abstract: The public generally has inadequate knowledge about 1) good places to observe quality wildlife populations and 2) habitat requirements for such populations. Wildlife observation areas are designed to help resolve both problems. Of 28 sites designated between 1981 and 1983, 75% are in cooperation with other agencies. Cooperative plans for each area are site-specific, but the owner-cooperator is normally the lead agency for enhancing wildlife observation opportunities and interpretative programs. By blending programs of similar interests, good opportunities are provided for improving enjoyment and public support of all wildlife resources at a minimal cost. A major goal of Tennessee's Nongame Wildlife Program is to provide the public with maximum opportunities for enjoyment of wildlife. Another goal is to better educate the public about habitat requirements of wildlife. Wildlife observation areas (WOA's) are designed to accomplish both these objectives. "Hot spots" for quality wildlife observation are identified for public use, while interpreting ecological values that make such quality populations possible. There is a substantial interest in watching and photographing wildlife. Surveys indicate that more than 2.8 million Tennesseans (61%) participated in such activities in 1980 (U.S. Dep. Int. Fish and Wildl. Serv. and U.S. Bureau of Census 1982b).

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies 38:662-670

Methods

Criteria

Tennessee's Wildlife Resources Commission established criteria for wildlife observation areas (WOAs) in February 1979 as follows (Tenn. Wildl. Resour. Agency 1979a):

1. Purpose
 - a. To provide the public with an opportunity to observe wildlife in their natural habitats.

- b. To interpret to the public the ecological factors contributing to the well being of various species of wildlife.
- 2. Description of Wildlife Observation Areas (WOAs)
 - a. Supporting above-average concentrations of wildlife on a permanent and/or seasonal basis.
 - b. Reasonably accessible to the public.
 - c. Sufficiently small for public interpretation and management.
 - d. Generally located on existing TWRA and other public lands in cooperation with controlling agencies. Purchase or lease of unique areas encouraged as public funds become available.
 - e. Wildlife visibility generally possible due to open areas, etc.
- 3. Methods
 - a. TWRC provide official recognition to the concept of WOAs.
 - b. Seek input from agency personnel and the public (Tennessee Ornithological Society, Audubon, etc.) concerning desired sites for WOAs.
 - c. Obtain cooperative agreements with public, and where possible private, landowners for designation of WOAs.
 - d. Enhance wildlife concentration where determined appropriate, by planting materials consistent with available wildlife species.
 - e. Provide bird feeding stations in selected areas of relatively high public use.
 - f. Prepare brochures describing site locations, species likely to be observed, seasons present and general ecological requirements.
 - g. Provide signs for public interpretation of likely species to be observed and their ecological requirements.
 - h. Cooperate with tourist promotion agencies in recognition and promotion of WOAs in relation to their potential economic contributions.
 - i. Provide natural or artificial blinds to enhance observation capability.
 - j. Provide observation platforms where appropriate and after funding becomes available.

Steps Leading To WOA Designation

Steps leading to designation of WOAs are summarized as follows:

1. Prospective site nominated for WOA, often by landowner or in coordination with landowner.
2. Site evaluated by State Wildlife Agency in coordination with landowner (if different from State Wildlife Agency); state regional office submits recommendation to central office concerning approval as WOA.
3. Letter sent to landowner by State Wildlife Agency inviting his con-

currence with WOA designation and outlining proposed agency cooperative responsibilities.

4. Landowner accepts State Wildlife Agency proposal by letter.

5. State Wildlife Agency responds that site is being designated on a given date; conditions and responsibilities are reiterated in spirit of cooperation.

6. A dedication ceremony is provided at one or more WOAs, with this forum often used to simultaneously designate other sites.

WOA Nominations

WOA nomination forms (Tenn. Wildl. Resour. Agency 1979*b*) were developed in order that any knowledgeable person could nominate sites in accordance with WOA criteria. Information on such forms included: 1) name of site, 2) location, 3) ownership, 4) site size, 5) major species and relative abundance by season, 6) habitat types and percentage of each, 7) existing land uses, 8) possible conflicts, and 9) needed enhancement of site. Where the nominators had incomplete descriptions of sites, more detailed information was often requested from the knowledgeable person.

On-site Cooperative Plans

Cooperative plans for each WOA are site-specific, but the owner-cooperator is usually the lead agency. In that event, the State Wildlife Agency role is usually to provide: 1) WOA logo signs to identify each site, 2) a state-wide WOA brochure briefly describing each area, 3) on-site WOA brochures, if requested by the lead agency, and 4) any requested input into WOA plans by the lead agency. The lead agency usually provides: 1) interpretative signs and/or programs, 2) any needed habitat improvement, and 3) any needed enhancement of viewing opportunity. The State Wildlife Agency provides all these functions on its own lands and does so to the extent feasible when cooperating agencies cannot do so. Cooperating agencies retain control over all management practices on their lands.

WOA Logo Signs

In order to help the public locate WOAs, 30 x 38-cm (12 x 15-inch) logo signs are provided (Fig. 1). The upper part is a 30 x 30-cm decal featuring a great egret on a blue background, with the message, "Tennessee Wildlife Observation Area." The lower 7.6 x 30-cm (3 x 12-inch) decal features a white horizontal arrow on a blue background. Both are attached to a 30 x 38-cm white aluminum blank. The arrow is designed for versatility. The arrow head can be cut to point either right or left for use as a directional sign; if already on site, the arrow head can be removed and the decal centered on the lower aluminum blank. Whether used as a directional or on-site sign, 1.9-cm ($\frac{3}{4}$ -inch) vinyl letters can be applied on the arrow shaft to spell out the WOA



Figure 1. Typical wildlife observation area logo sign as used for directional purposes.

name. However, such name can be omitted if the site name is apparent from other nearby signs. The total cost of each sign is approximately \$5.00 (1981 prices) exclusive of posts.

The WOA logo is derived from a drawing of a great egret by Dr. Fred Alsop, ornithologist of East Tennessee State University.

Observational Programs

Wildlife observation can be enhanced on WOAs by a variety of means including:

1. Habitat enhancement to attract greater numbers of a wide variety of species.
2. Bird feeding stations.
3. Observation blinds, including natural vegetation.
4. Clearing of limited vistas for better viewing opportunity.
5. Trails leading to key observation points.
6. Boardwalks through wetlands, etc.
7. Towers to improve observation vantage points.
8. Guided tours by naturalists/biologists to enhance: location, identification and protection of wildlife populations.

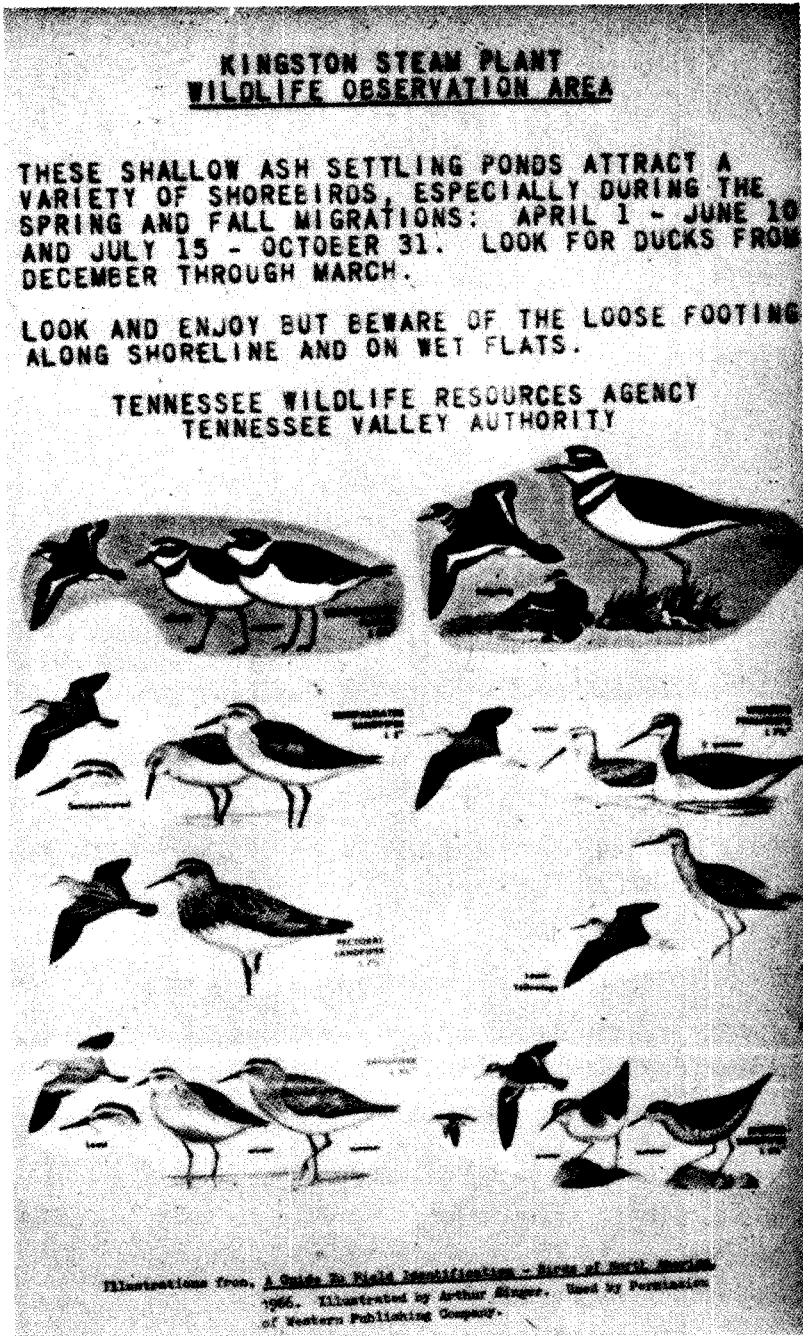


Figure 2. Typical interpretative sign on Tennessee wildlife observation areas.

Such observational program should be planned in a manner that will not cause significant disturbance of the wildlife involved. The primary concern must be given to the basic resource if such programs are to be successful.

Interpretation Programs

Ecological values may be interpreted at WOAs in a variety of means. Where there is a wide variety of habitat to be interpreted, numbered trail stations and a self-guiding brochure provide for an efficient learning experience. There is a description of the ecological values of each station, as related to wildlife species expected to be present or benefited. Numbered stations are subject to less vandalism when numbers are routed directly on posts embedded in concrete.

Where only a few habitat types are present, we often provide inexpensive, but effective, interpretative signs (Fig. 2). A typewriter with extra large print is used to type a brief site description on legal-sized paper. Color cut-outs of typical site species are posted to the bottom half with the permission of a field guide publisher. This legal-sized paper is then thickly laminated and installed inside a 5.1 x 5.1-cm (2 x 2-inch) cypress frame, painted "park brown." A plexiglass cover fits into grooves inside the frame. Caulking is not necessary for waterproofing such signs. The total cost per sign is about \$28 (1983 prices), including carpenter labor costs.

An aerial photo was used as a basic planning tool for mapping self-guiding numbered trails. Prospective interpretive habitats were initially numbered on the photo along a proposed trail, with accompanying station descriptions sketched on separate paper for each tentative numbered station. From this preliminary list of candidate stations, a final list was chosen from the best interpretive habitats, with consideration given to even distribution of stations around the trail. From this revised trail layout on the aerial photo, a trail map could easily be prepared, featuring numbered stations along the trail and key reference points, for placement on the WOA brochure. Such brochure described habitat and related species typical of each numbered station (Tenn. Wildl. Resour. Agency 1982, 1983). At some WOAs, station initials (e.g. BP for brush pile) were used instead of numbers in order to allow more versatility in future revision of trail stations (Tenn. Wildl. Resour. Agency 1984a, 1984b). Trails were designed along existing trails and where bush-hogging was possible, to the degree feasible, in order to minimize development costs and maintenance.

Some WOA brochures featured lists of typical birds, by season and relative abundance (Tenn. Wildl. Resour. Agency and Tenn. Valley Authority 1983). This was more appropriate where one or two habitat types dominated a WOA (e.g. wetland/mudflat). Birds were featured more than other animal class because of their higher visibility and popularity by wildlife observers (Hovarth 1974 and U.S. Dep. Int., Fish and Wildl. Serv. and U.S. Bureau of Census, 1982).

Results

Sites Designated

On 17 October 1981 and 16 April 1983, a total of 28 sites were designated as WOAs in Tennessee. They ranged from 22 acres to several thousand acres. Twenty-one (75%) of these sites were in cooperation with other state, federal, and local governmental agencies (Table 1). The other seven sites were on lands owned or operated by the Tennessee Wildlife Resources Agency. No WOAs were designated on private lands, but were not automatically disqualified. Thirteen nominated sites were not approved as WOAs for a variety of reasons, primarily for failing to meet WOA criteria. Dedication ceremonies were held at four WOAs, with 14 designations being simultaneously made at two of these forums. Two of the four dedication ceremonies were held, one at the request of cooperators, after formal designations had already been made.

Conflict and Resolution

No significant conflicts have developed with WOA designations except at one site, Savannah Bay. This 300-acre embayment of Chickamauga Reservoir

Table 1. Tennessee's wildlife observation areas designated between October 1981 and April 1983.

WOAs (listed west to east)	County	Cooperating agencies ^a
1. Reelfoot Lake	Lake-Obion	TWRA, St. Pks, USFWS ^b
2. Ft. Pillow Park	Lauderdale	Conservation, TWRA
3. Herb Parsons Lake	Fayette	TWRA
4. Lake Graham	Madison	TWRA
5. Big Hill Pond	McNairy	Conservation, TWRA
6. Pace Point	Henry	USFWS, TWRA
7. Duck River Bottoms	Humphreys	USFWS, TWRA
8. Cheatham Res. WMA	Cheatham	TWRA, Corps of Eng.
9. Radnor Lake	Davidson	Conservation, TWRA
10. Elm Hill Sink Hole	Davidson	TWRA, Corps of Eng.
11. Goose Pond-Percy Priest WMA	Rutherford	TWRA, Corps of Eng.
12. Bledsoe Creek State Park	Sumner	Conservation, TWRA
13. Willow Gr.-Lillydale	Clay	Corps of Eng., TWRA
14. Signal Point	Hamilton	U.S. Park Service, TWRA
15. Savannah Bay	Hamilton	TWRA, TVA
16. Blythe Ferry WMA	Meigs	TWRA
17. Sugar Creek	Meigs	TWRA
18. Candies Creek	Bradley	TWRA
19. Mt. Roosevelt	Roane	TWRA
20. Kingston Steam Plant	Roane	TVA, TWRA
21. Cove Lake State Park	Campbell	Conservation, TWRA
22. Norris Songbird Trail	Anderson	TVA, TWRA
23. Eagle Bend Hatchery	Anderson	TWRA
24. U. T. Arboretum	Anderson	Univ. of Tenn., TWRA
25. Cades Cove	Blount	U.S. Park Serv., TWRA
26. Nolichucky	Greene	TVA, TWRA
27. Bays Mt. Park	Sullivan	City of Kingsport, TWRA
28. Wilbur Lake	Carter	TVA ^a , TWRA

^a Lead agency list first.

(on Tennessee River) attracts unusually large concentrations of shorebirds and other water-oriented birds. The shoreline is primarily surrounded by housing developments, buffered by TVA lands averaging approximately 60 m (200 feet) in width. A 1.6-hectare (4-acre) TWRA-owned boat access area also borders the bay.

After announcement of the proposal, equally strong support and opposition developed from local residents. Opposition sprang primarily from unfounded rumors that certain existing land uses were to be curtailed. Some adjacent landowners also feared increased foot traffic across the TVA buffer area behind their homes. Some also feared increased litter and increased undesirable use of the access area parking lot and a proposed new pull-off area.

These conflicts were resolved after several months and three local meetings. Primary credit was due to the persistence, persuasion, and diplomacy of the local supporters. The false rumors about proposed land uses were clarified. The Chattanooga Sierra Club agreed to periodically pick up litter, which was already a problem, and members of the club have been faithful in fulfilling their promise. The sheriff agreed to periodically check the parking areas for undesirable night use. A Boy Scout group agreed to construct two short bridges on a trail isolated from housing developments. A local resident agreed to periodically bush-hog the trail. No complaints have been reported since Savannah Bay was designed as a WOA in October 1981. However, one former strong opponent called to offer his assistance in supplementing the Sierra Club's litter control activities.

Costs

Due to the cooperative nature of WOAs and integration with existing related programs, the costs of WOAs has been minimal and primarily related to coordination. In 1984, TWRA's share of costs averaged less than \$300 per site. However, there is a need for continued improvement in interpretative and observational programs. Needed development costs in 1984 are estimated at an average of \$1,500 to \$2,000 per site (Tenn. Wildl. Resour. Agency 1979a).

Future Designation

Additional sites continue to be nominated and evaluated for future designations, which will be in packages of multiple sites whenever practical.

Discussion

Many agencies and individuals are interested in wildlife and their welfare. Many closely related programs are already in existence, but possibly with less emphasis on wildlife and habitat relationship than preferred at WOAs. WOAs provide opportunities for more efficient and effective accomplishment of our mutual interest for improved enjoyment and understanding of our wildlife. By improving public appreciation and knowledge of the value of such

habitats as wetlands, there should be a broader public interest in preserving and managing such ecosystems for the benefit of all wildlife species. WOAs provide a system wherein a variety of groups can work together for their common interest—wildlife; hopefully for a better tomorrow for all of us.

Literature Cited

- Hovarth, Joseph C. 1974. Southeastern economic survey of wildlife recreation. Ga. State Univ. 188pp.
- Tennessee Wildlife Resources Agency. 1979*a*. Nongame wildlife operational plan. 91pp.
- . 1979*b*. Wildlife observation area form. 5pp.
- . 1980. Tennessee's wildlife observation program: some questions and answers. 2pp.
- . 1982. The habitat trail. 6pp.
- . 1984*a*. Herb Parsons Lake nature trail. 6pp.
- . 1984 *b*. Lake Graham nature trail. 6pp.
- . 1983. Goose pond wildlife observation area.
- and Tennessee Valley Authority. 1983. Kingston Stream Plant wildlife observation area. 6pp.
- U.S. Fish and Wildlife Service and U.S. Bureau of Census. 1982*a*. 1980 national survey of fishing, hunting, and wildlife associated recreation. 156pp.
- and ———. 1982*b*. 1980 national survey of fishing, hunting, and wildlife-associated recreation—Tennessee. 74pp.