- Thigpen, J. and D. W. Steinbach. 1990. "Marketing the Hunting Experience." Texas Agricultural Extension Service, No. B-1694. Texas A&M University System, College Station, TX.
- Thomas, J. K., and C. E. Adams. 1989. "The Public and Texas Wildlife." Texas Agricultural Experiment Station, Texas A&M University, College Station, TX.
- Thomas, J. K., C. E. Adams, W. K. Knowles and D. W. Steinbach. 1989. Development of Wildlife Resources on Private Lands." Texas A&M University System, College Station, TX.
- Thomas, J. K., C. E. Adams and J. Thigpen. 1990. "Texas Hunting Leases: Statewide and Regional Summary." Technical Report No. 90-4. Texas Agricultural Experiment Station, Texas A&M University, College Station, TX.
- United States Fish and Wildlife Service. 1988.1985 Survey of Fishing, Hunting and Wildlife Associated Recreation. Washington, DC.

	Sample Fishing Lease								
	This lease made and entered into this	at any time exceed (numb  7. LESSEE will not cut crops, roads, feares, build located on the daed proj compensate L. Trowver determined by NDOW limited to estd any fro property  A. LESSE B. B. B. not as the property of any par the art of NDOWNER  LESSEE agrees to a inst any and all claims other expense of any natu may arise out of, be conn LESSEE'S occupancy and a ty.  10. If LESSEE defaults the conditions or covenan shall cause an immediate a forfeiture to LANDOWN  11. LESSEE and his g evernight on the premises the pond.  12. LANDOWNER agree control in and around the additional management pra ecg. periodic stocking with of any other facilities the lessee's use).	injure, or destroy any trees, injure, or other improvements berty, and LESSEE agreed to for all damages so caused as NNER. Vehicular travel is add now located on leased sign this lease or sublet the tothereof without the written ave harmless LANDOWNER of loss, damages, liabilities, or tre, cheracter, and kind that ected with, or as a result of ctivities on the leased properior the performance of any of its hereof, then such breach ermination of this lease and ER of all rentals prepaid and (may) (may not) swim in the maintain adequate weed are pond, and (describe any activities that will be performed, catfish, feeding of fish, etc., at will be provided for the						
		!ANDOWNER WITNESS	LESSEE (Space should be provided for each lessee to sign.)						
L									

From "Fee Fishing in Florida," Charles E. Cichra.

For more information about aquaculture in Oklahoma, see our OSU county Extension agent or contact Marley D. Beem, Extension Aquaculture Specialist, 303J Ag Hall, Stillwater, OK 74078-6013 (phone: 405-744-9636).

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# **OKLAHOMA COOPERATIVE EXTENSION SERVICE SRAC-481**



# Development and Management of Fishing Leases

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Leasing of hunting rights to generate income for landowners has become a common practice in most southern states. However, leasing of fishing rights generally has been limited to "fish-out ponds," where channel catfish, rainbow trout, or other species are stocked in specially designed (aquaculture) ponds. Other fee fishing systems include day and long-term leasing of ponds and reservoirs for sportfishing.

The popularity of fishing leases as farm or ranch enterprises has not kept pace with hunting leases generally because water resources held in the public domain have been more readily available compared to state and federal land for sporthunting. Nevertheless, a new trend involving fee fishing is slowly developing across the South. An increasing number of landowners who lease hunting rights are realizing that ponds and reservoirs on their property are valuable resources with the potential to generate additional profits.

Properties with sportfishing opportunities should be more valuable than lands leased for hunting alone, depending on the profitability of sportfish leases. A survey of Texas hunting leases reported that ponds were present on nearly one third of the ranches and that fishing was considered a popular recreational activity on 18 percent of these leases. Results of a 1985 survey by the U.S. Fish and Wildlife Service indicated that while 16.7 million adult Americans hunted, over 2.5 times that number (46.6 million) went fishing.

Demand for opportunities to lease sportfishing rights is expected to increase as demand on public waters increases. It has been reported that demand for fishing is more than twice the demand for hunting among Texans. Furthermore, anglers reported that on average they would take almost twice as many trips as hunters. Anglers were willing to take five trips averaging 125 miles/trip, while hunters were willing to take three trips at 250 miles/trip annually.

Sportfishing as an income-generating enterprise in combination with hunting leases recently has begun to interest some landowners. This is especially true on properties that are not capable of supporting hunting recreation because of limited tract size or urbanization. An increasing number of pond owners have realized that there is a demand for quality sportfishing opportunities. Much of the demand for leased fishing rights results from increased fishing pressure on public waters, decreased construction of new reservoirs, desire for exclusive fishing rights and reasonable expectations of catching fish.

The most important ingredient to successfully leasing private waters for sportfishing is proper management of fish

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populations. This ensures that they remain at levels capable of supporting reasonable harvest rates. The increased interest in catch and release fishing enhances the opportunities for more anglers to share the available fisheries resources. Catch and release also is consistent with anglers' desire for exclusive fishing rights and expectations of catching fish.

## Management

Major steps involved in sportfish leasing include locating lessees, establishing the terms of the lease, and drawing up the lease agreement. Landowners offering fishing rights based on a management plan of "there's the gate and here's the key" will seldom be successful. Careful consideration of expected revenues and costs of starting a sportfish leasing program will provide reasonable expectations for profit. Landowners need to carefully plan their leasing enterprise to match available resources, demand for recreational experiences and profit expectations. For instance, sportfisheries emphasizing trophy size fish receive considerable publicity, yet anglers indicate trophy fishing ranks low as a motivation to go fishing.

Larger ponds and reservoirs offer more options for managing fish populations. For example, landowners with 10-acre reservoirs are in a more favorable position to manage exclusively for large-mouth bass than landowners with 1-acre ponds. Even though a market may exist for a target species such as largemouth bass, landowners might consider other species such as channel and blue catfish, sunfish, crappie and even rainbow trout. These alternative species may appeal to a broader range of anglers and may offer increased fishing opportunities.

Marketing is an important responsibility managers face in operating successful fishing leases, as it is for successful hunting leases. Landowners successfully leasing private waters for fishing will offer unique experiences at reasonable prices. These will not be readily available or accessible to the

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general public at public fishing areas. Careful evaluation of direct competition from other leasing operations, of alternate public fishing areas, and of the number of potential lessees is necessary.

Lease fees received by landowners should be expected to pay the various expenses associated with establishing and operating lease enterprises in addition to acceptable returns for landowner labor and management. Investment costs may vary from onetime expenses such as pond construction or improvement to annual operating input costs including fertilizers, labor, chemicals, and maintenance. Additional expenses may include security, liability insurance, and a portion of the property's ad valorem taxes. Many landowners will be leasing fishing rights on existing ponds or lakes and will not be incurring actual costs involved in pond or reservoir construction.

Management strategies important to developing fisheries on private lands are:

- 1. Appropriate stocking rates and species balance;
- 2. Control of noxious aquatic vegetation; and
- In some cases, fertilization to increase carrying capacity.

Other important operational activities include water quality maintenance, fish attractor construction and maintenance, and fish population surveys conducted by a professional biologist.

## **Value-added Amenities**

In addition to basic input costs, additional service-related amenities often provided to clientele include boats and motors, fishing tackle, guide services, meals, and lodging. These value-added items are often desired by anglers, but do increase the cost of the lease. Landowners establishing a profitable leasing enterprise must determine in advance how much potential customers are willing to pay for these value-added amenities. It is important to ensure that revenues exceed costs of establishment and operation for a profitable enterprise.

## **Economic Analysis**

The potential profitability of investing in a sportfish lease enterprise should be evaluated prior to start-up in much the same way as any long-term investment with expected future returns. Net present value (NPV) analysis is an appropriate economic tool for estimating the profitability of establishing a sportfish leasing enterprise while accounting for the long-term nature of the investment.

The calculation of NPV is accomplished by deducting current investment requirements from future net earnings, expressed in terms of current dollars, generated by the investment. Expressing future net earnings in current dollars involves accounting for expected inflation and anticipated interest earnings foregone by not putting the same amount of money in an alternative investment. In other words, NPV accounts for the time value of money or the earning potential money has if placed in an interest paying account.

For example, the current value of a contract promising to pay \$100 after 5 years is \$68.05 (assuming money would earn a real rate of 8 percent interest in an alternative investment). On the other hand, a \$68.05 investment today at 8 percent

(real rate compounded annually) interest would grow to \$100 at the end of five years. In other words, a person would be indifferent between having \$68.05 today and \$100 five years in the future with the opportunity to earn an 8 percent real rate of interest.

The discount (interest) rate used in estimating NPV is a reflection of several factors, including the landowner's expected return on this and other alternative investments, level of risk involved, and prevailing inflation rate. It is appropriate to consider foregone opportunities as costs in economic evaluations and in establishing the rate at which future earnings are discounted to current values since other activities may be negatively impacted by the decision to lease part or all of the available fishing rights.

For example, a landowner facing the costs and revenues listed in Table 1 for an existing 10-acre pond receives more than the 8 percent real return on investment included in the NPV analysis, as indicated by the positive NPV estimate. Results in this example imply that as long as the annual lease fee is greater than \$902/yr, the landowner would reap greater benefit from the lease than from investing in an alternative with an 8 percent real rate of return. If the 10-acre lake were located on a 1,000-acre hunting lease, the annual lease fee for fishing rights might be included with the hunting lease by adding an additional amount per acre to the original hunting lease charge.

# Marketing and Promoting Sportfish Leas-

es

Outdoor recreation experiences consist of five parts: planning and anticipation, travel to activities, on-site activities, travel from activities, and recollection of experiences. All of these elements are important to successfully marketing the fishing enterprise.

Marketing consists of matching the products of an operation with the needs and desires of customers. However, marketing a recreational experience differs from marketing commodities such as crops, livestock, and timber. Landowners interested in marketing sportfish recreation will be dealing with a "non-standard" commodity and will probably be dealing directly with customers (marketing retail).

If on-site lodging is available and the property is close to an urban area, landowners may want to employ a lease of limited duration, i.e., day, weekend, or week. However, if landowners do not desire a high degree of contact with the public or cannot provide lodging, a season-long or year-round lease may be preferred. Each landowner must determine the marketing strategy that best suits the individual situation.

Many people mistakenly believe that marketing is just another word for advertising. Promotion can take on many forms, only one of which is advertising. Two effective ways to promote leasing arrangements are personally explaining your leasing opportunities to anglers and providing testimonials by satisfied customers. Advertising techniques that have proven successful for hunting leases also apply to sportfish leases. Word of mouth, local news, natural resource agencies, and chambers of commerce are primary sources of advertising for hunting and fishing lease information. Other successful advertising and publicity techniques include, but are not limited to, magazine articles, television, radio, sports shows, trade journal stories, and direct mail-outs.

Table 1. Example net present value (NPV) analysis of sporttish leasing on an existing 10-acre lake.1

Item		Years			
	Start Up	1	2	3	4
Revenue-Lease Fees	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250
Fingerlings	700				
Fertilizer	150	150	150	150	150
Lime	40				
Herbicide	200	200	200	200	200
Labor	250	250	250	250	250
Taxes	30	30	30	30	30
Insurance	100	100	100	100	100
Net Income	(220)	520	520	520	520
$NPV^2$	\$1,502				
Breakeven lease price <sup>3</sup>	\$ 902				

Assumptions used in creating this example include: (1) lease fees collected at the start of each year to eliminate borrowing operating capital, (2) start-up costs are assumed to be on owner capital contribution, (3) operating costs are incurred at the beginning at each year, 4) NPV calculated using an 8 percent real rate of return and (5) lake contains fish populations but supplemental stocking of Florida bass and channel catfish fingerlings is planned.

# **Lease Agreements**

In order to prevent misunderstandings and clearly define the terms of a sportfishing lease, a written agreement should be developed by the lessor and signed by both parties (see example on page 4). With obvious modifications, many considerations included in hunting leases can be used as a basis for developing written sportfishing lease agreements. Deer lease agreements often include duration of the lease, description of the lease tract, access, species available, hunting methods allowed, density of hunters, price, payment schedule, use of facilities, lease transferability, and rights lease renewal.

Although it is possible to prepare a written sportfishing lease on your own, it is recommended that you consult your lawyer during the actual drafting of the document. Money paid for such services may well prevent potential legal problems. At least two copies of the lease should be prepared and properly signed — one copy for the landowner and the other for the lessee(s).

## **Landowner Liability**

As with hunting leases, landowners must address the issue of liability whenever sportfishing rights are leased. Landowners leasing sportfishing rights should include a "hold harmless" clause in a written lease agreement that protects them from liability and makes lessees responsible for damage or accidents. Since "hold harmless" clauses are not infallible, landowners should consider extending insurance coverage or requiring lessees to purchase liability insurance that covers both parties. Statutes regarding liability may also differ between states.

# Summary

Although the leasing of sportfishing opportunities is a relatively new enterprise compared to hunting leases, management and marketing concepts are similar. Landowners interested in marketing sportfishing recreation must wear two hats: the hat of a fisheries manager to maintain suitable fish

populations and the hat of a successful business manager to maintain positive cash flows and profitability while working with clientele. Unfortunately, many individuals are accomplished and comfortable in one of these roles, but lack the skills or interest to be attentive to the other. The success of sportfishing operators depends upon well thought out, detailed, and written management and marketing plans. The intense competition that exists today for the publics' recreation dollar almost ensures that those depending on blind luck will not succeed. The availability of quality fishing is an important component of a sportfish recreation enterprise. However, it is only one part of the entire recreational experience.

#### References

Cichra, C. E. 1989. "Fee Fishing in Florida." Florida Cooperative Extension Service Circular No. 809. Gainesville, FL.

Clawson, M. and J. L. Knetsch. 1966. "Economics of Outdoor Recreation." Published for Resources for the Future by Johns Hopkins Press. Baltimore, MD.

Fambrough, J. and J. C. Stribling. 1988. "The Texas Deer Lease." Texas Agricultural Extension Service, No. L-2334. Texas A&M University System, College Station, TX.

Higginbotham, B. J. and M. H. Legg. 1989. "Fee Fishing: Aquaculture or Recreation Proceedings of Texas Fish Farming Conference, Texas Agricultural Extension Service. College Station. TX.

Marion, W. R. and J. A. Hovis. 1985. "Developing a Hunting Lease in Florida." Florida Cooperative Extension Service. Fact Sheet WRS-1. Gainesville, FL.

Reichers, R. K. and G. R. Wilde. 1991. Comparisons of Motivations, Characteristics, and Attitudes of Texas Freshwater and Saltwater Anglers. 121st Annual Meeting, American Fisheries Society, San Antonio, TX.

Stoll, J. R. and G. Dharmaratne. 1989. "Private Sector Transactions in the Market for Recreational Hunting Opportunities." Unpublished Manuscript. Department of Agricultural Economics, Texas A&M University, College Station, TX.

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<sup>&</sup>lt;sup>2</sup> NPV=current value of future net incomes minus initial start-up costs.

<sup>&</sup>lt;sup>3</sup> Lease price at which NPV equals \$0.