


<b>Fisheries Branch</b> <b>Directive</b>	Program: Recreational Fishing Guideline Type: Management (Management, Administrative)
Subject:  Application of Size Limits to Recreational Fisheries in Manitoba.  Revision Date: 2006 / 09 / 01	Date Approved: February 5, 2007   <hr/> Director, Fisheries Branch

## INTRODUCTION

For many years size limits, in some form, have been part of Manitoba angling regulations. From 1947 to 1956, minimum size limits of 37.5 cm were applied to all walleye caught in Manitoba. This regulation was removed in 1957 and it was not until 1982 that size limits re-appeared.

**Maximum size limits** were introduced in 1982 for northern Manitoba. Anglers were allowed to keep only one walleye, pike and lake trout over designated lengths. This regulation, aimed at protecting larger fish, was applied to the southern division in 1983, then was lowered in 1985 and lowered again in 1987 to be more effective.

**Minimum size limits** re-appeared in 1984 when a 30 cm limit was placed on walleye in Killarney Lake. This walleye fishery was supported through stocking because there was no natural recruitment. It was felt that the release of all walleye under 30 cm would allow the fish to attain a harvestable size and keep more fish in the lake for anglers to catch. This regulation was expanded to other small lakes and reservoirs in southwest Manitoba and in 1987 a 35 cm minimum size limit was applied on walleye in Lac du Bonnet in response to concerns about poor angling. In 1989 minimum size limits were standardized wherever they were applied in the province at 35 cm to simplify regulations for anglers. Minimum size limits were expanded to other waters in the eastern part of the province and in 1994 this regulation was applied to the entire Whiteshell Provincial Park.

**Slot limits** were first applied in 1988, on Gunisao Lake and Wrong Lake. All walleye between 55 cm and 70 cm had to be released. Slot limits were also developed for pike. In 1989 a walleye slot limit of 45 cm to 70 cm was applied to Lake of the Prairies and this same regulation was applied to Whitefish Lake in 1990. In all cases, the intent was to protect mature, spawning fish in situations where there were no habitat and recruitment concerns. Slot limits were expanded in the north but were replaced with no-kill regulations in 1995. Slot limits for walleye remain in place for Lake of the Prairies and Whitefish Lake and in the 2000 angling season, a slot limit prohibiting the harvest of walleye between 38 cm and 70 cm replaced the minimum size limits on Lac du Bonnet and in Whiteshell Provincial Park. This slot limit was simultaneously applied to Nopiming Provincial Park and other waters as noted in the 2000 Anglers' Guide. In 2001, a pike slot limit was



introduced on the Winnipeg River from Pointe du Bois to the Ontario border and in 2006 a walleye slot was introduced on Lake St. George.

There are also an increasing number of fisheries in the province where anglers are prohibited from harvesting specific fish over the maximum size limit set for that species. All three northern angling divisions do not allow the retention of walleye, pike and lake trout over maximum size limits on High Quality Management (HQM) waters. This provides protection for all larger fish and has become a marketing tool for many tourism facilities.

The application of size limits has varied from region to region and recently, during angling regulation review meetings, the question of appropriateness of application has arisen. In spite of the lack of data in all cases, it is agreed that some applications of size limits have been successful while others have been questionable. Following are some specific examples of waterbodies where size limits have played a major role in fisheries management.

### **Lac du Bonnet**

In 1987 a minimum size limit of 35 cm was placed on walleye and several other measures were applied to address a reduction in angling quality. Pressure on this fishery had increased and anglers were complaining that too many anglers were harvesting small walleye. Minimum size limits were placed on this fishery in an effort to allow small walleye to grow before being caught and to build a larger population of walleye so that anglers would have some to catch. Extended spring closures were also applied to some areas of the lake and the increase in the number of anglers buying Conservation Licences appeared to reduce potential harvest. As in other situations, there was a general acceptance of this type of regulation as anglers perceived that releasing smaller fish is good for the resource and is the ethical "thing to do".

However, questions were raised as to the effectiveness of this regulation on Lac du Bonnet. With this type of regulation, angling mortality can be very high for those fish just above 35 cm. Index netting conducted annually since the regulation was put into place showed numbers of walleye below 35 cm declining but not as fast as the number of walleye above 35 cm. In addition, walleye had to grow beyond 35 cm to reach maturity. The combination of a minimum size limit and the fact that walleye in Lac du Bonnet did not mature while in the protected size range meant that harvest pressure was being deflected to the entire spawning brood stock. With sufficient pressure, declining numbers of walleye below 35 cm may have been due to excessive reduction in brood stock and subsequent reduced recruitment. Given the results of data collection over the past years, the application of minimum size limits for walleye on Lac du Bonnet became part of the review of minimum size limits on this fishery as well as in Whiteshell Provincial Park and other local fisheries.

The review of size limits in the eastern part of the province resulted in the removal of minimum size limits and replacing them with a slot limit that protects walleye between 38 cm and 70 cm. It was felt that this major shift in management approach was necessary to



provide longer-term stability for walleye populations in the affected area. Although the size of the slot selected varied from other walleye slot limits, data collected indicated that a 38 cm starting point for the slot limit was necessary for the regulation to be effective in protecting brood stock while still capturing some of those walleye previously protected by minimum size limits. As with other waters with slot limits, the objective is to protect sufficient, mature walleye to maintain populations. The department has committed to an annual collection of data and review of the slot limit with the objective of raising the low end of the slot to allow for greater flexibility for harvest.

### **Lake of the Prairies**

Lake of the Prairies is a relatively new fishery having been created by the Shellmouth Dam as a flood control reservoir. The growth of the walleye fishery was phenomenal in the mid-seventies and through into the early eighties. However, increasing pressure combined with some poor year classes in the mid 1980's resulted in angling quality that was well below the expected standard. In 1985 the creel limit for walleye was reduced from eight to four and in 1989 a slot limit of 45 cm to 70 cm was applied to walleye for this fishery. This lower end of the slot limit (45 cm) differed from the lower end of the northern Manitoba slot limit (55 cm) as it was felt that a lower slot limit was needed to be effective.

Data have shown that slot limits are ineffective if fish are not being recruited into the protected zone. The objective of a slot limit is to protect sufficient mature fish to sustain a viable population for anglers providing that proper habitat is available and there are no recruitment problems. Data collected since 1991 have shown that the slot limit was protecting few fish in 1989 but by 1995, a significant number of walleye were being protected and there was an increase in the number of walleye below the slot limit. This resulted in the production of a strong year class in 1995 as numerous adult walleye were available during a spring with optimal spawning conditions.

### **Southwestern Lakes**

There are a number of small lakes in the southwest part of the province that support angling opportunities for walleye. Generally, these lakes are stocked as there is little or no recruitment and/or winterkill is a common occurrence. Suitable walleye spawning habitat is seldom available and water quality is often low. Many of these lakes are aerated to maintain these fisheries and improve water quality for nearby communities.

Minimum size limits and reduced creel limits have been applied to many of these fisheries. The objective of these regulations is to spread the harvest of walleye over more anglers, allow walleye to grow to an appropriate size before being harvested, and retain fish in these lakes for anglers to catch as angling pressure can be high relative to the size of the lake. These regulations have been popular with anglers and these fisheries appear to be meeting their objectives.

### APPLICATION OF SIZE LIMITS

It has been the intent of Fisheries Branch to apply size limits on a consistent basis, meet the objectives of the fishery, and to avoid confusing regulations for anglers. Maximum size limits were applied and adjusted on a divisional basis and regulations prohibiting harvest over maximum size limits have been applied on an individual lake basis, and more recently, on a divisional basis, to protect trophy fisheries.

Slot limits were introduced in the north to protect fisheries rather than to rejuvenate stocks. In many instances they were requested by tourism operators, users and/or user groups. The Lake of the Prairies slot limit was proposed by fisheries managers to protect spawning stocks as part of the plan to rejuvenate the fishery. This was also the major objective of applying a walleye slot limit for a large part of eastern Manitoba in 2000.

Minimum size limits for walleye were first used in the southwest for walleye fisheries that were stocked annually and had limited recruitment, and were an attempt to maintain fishing opportunities. The application of minimum size limits to Lac du Bonnet was an attempt to protect and enhance the existing fishery. Applying this regulation to other lakes in the eastern region and all of the Whiteshell Provincial Park was intended to enhance the fisheries and provide fish for anglers to catch even though they would be unable to keep the majority of fish that they caught. Unlike the western lakes, these fisheries were not stocked regularly and did not have habitat problems. This placed increased pressure on mature walleye, resulting in a reduction of adult fish available for spawning. The regulation was removed in 2000 and replaced with a slot limit.

Size limits have generally been applied to walleye but have also been applied to pike, lake trout, and catfish fisheries over the years. Some regulations have been removed and replaced with others and others remain but require evaluation. Over the past several years, a review of minimum size limits in eastern Manitoba has resulted in a major management change in the application of slot limits and minimum size limits. The following guidelines are meant to clarify existing applications and to assist with the evaluation of future size limit regulation proposals.

#### A. Maximum Size Limits

The objectives of maximum size limits are to protect large fish from over-harvest and thus protect valuable spawning fish and, from an economic perspective, protect trophy-sized fish that are valuable to the tourism industry. This regulation also distributes larger fish among more anglers thus giving anglers a greater chance to catch a larger fish. It also promotes a conservation ethic with anglers by emphasizing the value of larger fish.

Maximum size limits that allow the harvest of one grayling, lake trout, pike, smallmouth bass, stocked trout, and walleye over a designated size will remain unless it is determined that adjustments are necessary to meet changing demands. Regulations prohibiting the harvest of native brook trout and catfish over a designated size, as well as lake trout in the

Northwest Division, will remain and no other species will be considered unless there are justifiable conservation reasons.

Presently HQM lakes in the Northeast, North Central, and Northwest divisions require the release of walleye, pike, lake trout, and grayling over maximum size limits. This type of regulation will only be applied in the future to HQM lakes that are economically significant to the tourism industry and have trophy stocks or the ability to produce trophies. Applying this regulation to a whole division will only be considered for the northern divisions and only after significant consultation and agreement from resident anglers and the tourism industry.

Based on available data, existing fisheries with maximum size limits should be reviewed to determine if they are meeting stated objectives. The following criteria should be used to evaluate future requests for this regulation and to review existing applications. Waters that would qualify for maximum limits should meet, but not be restricted to, the following criteria:

- The water body supports an existing trophy fishery;
- The regulation would protect valuable spawners in the population; and
- The regulation would maintain or enhance existing investments and tourism-related opportunities.

### **B. Slot Limits**

The objectives of slot limits are to protect intermediate and larger spawning fish on waters that receive heavy angling pressure and where recruitment has not been impacted by loss of habitat and/or water quality. If properly set, this regulation should protect sufficient numbers of spawners to provide better recruitment and increased catch rates for anglers.

Slot limits presently in place for Lake of the Prairies, Whitefish Lake, Wellman Lake, and Lake St. George prohibit the harvest of walleye from 45 cm to 70 cm. The walleye slot limit for eastern Manitoba prohibits the harvest of walleye between 42 cm and 70 cm and was set at this level based on data collected from Lac du Bonnet and other representative waters in the area. Based on future data collection, the intent is to raise the lower end of the slot to match other waters. Fisheries where slot limits should be considered are those experiencing high angling pressure that results in excessive harvest of mature fish and restricted recruitment. Habitat and water quality should not be limiting factors affecting poor recruitment in waters being considered for slot limits.

Northern Manitoba has had a number of fisheries with slot limits for pike and walleye. Over time these have been removed and converted to fisheries that prohibit the harvest of walleye and pike over maximum size limits. This trend should continue and slot limits should not be considered for northern fisheries.

Based on available data, existing fisheries with maximum size limits should be reviewed to determine if they are meeting stated objectives. The following criteria should be used to

evaluate future requests for this regulation and to review existing applications. Waters that would qualify for slot limits should meet, but not be restricted to, the following criteria:

- Heavy angling pressure and harvest rates are negatively impacting recruitment;
- Fish habitat / water quality is not a limiting factor (i.e. natural spawning habitat is available); and
- The slot limit size to be used will effectively protect key spawners in the population.

### C. Minimum Size Limits

Minimum size limits have been mainly applied to walleye fisheries. An additional application has been made to stocked trout in Duck Mountain Provincial Park and the Porcupine Provincial Forest. The primary objective of this regulation is to reduce and distribute harvest on heavily fished lakes, particularly for fisheries with limited or no recruitment.

Small southwestern lakes and reservoirs were the first fisheries to have minimum size limits reintroduced. In most cases, these were fisheries that were heavily fished because they were the only walleye fisheries in the area, had minimal or no recruitment, frequently winterkilled, and/or were supported by stocking. In these cases survival to maturity did not add to the fishery because there were limiting factors to recruitment. This type of regulation is popular with local users because the quality of the fishery was stabilized.

Minimum size limits were applied to Lac du Bonnet in 1987 as part of a rehabilitation plan for walleye. The regulation eventually was applied to Bird Lake, Bird River, Booster Lake, and the Whiteshell Provincial Park. These latter applications were mainly a result of requests by users and several other requests have been refused. These fisheries are different from those in the southwest. While all fisheries received heavy angling pressure, the eastern fisheries did not have recruitment problems due to habitat concerns and they were not stocked on a regular basis. The regulation for these waters was removed in 2000 and replaced with a slot limit.

Many anglers perceive minimum size limits to be an effective management tool and they agree in principle with protecting small fish. In some instances it can meet expected objectives. If one of the objectives is to rehabilitate fish stocks, minimum size limits must be set to protect sufficient mature fish to sustain the fishery or an appropriate slot limit applied to protect these fish while still allowing some harvest.

Based on available data, existing fisheries with minimum size limits should be reviewed to determine if they are meeting stated objectives. The following criteria should be used to evaluate future requests for this regulation and to review existing applications. Waters that would qualify for minimum size limits should meet, but not be restricted to, the following criteria:

- There is low or no recruitment due to habitat\water quality degradation;
- The waters are fully aerated;

- The fishery is regularly stocked to provide angling opportunities;
- The waters and/or fisheries are small with high angling harvest rates; and
- The fisheries is on a reservoir or other non-natural water body.

