FOSSIL SHARK TOOTH

GRADING & VALUATION SYSTEM | FGTVS v1.0

1 CONDITION GRADES

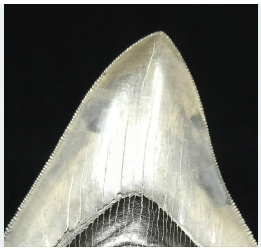
ENAMEL (E)

E1 Poor



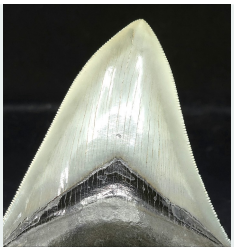
Heavy wear, chips, cracks or restoration

E2 Good



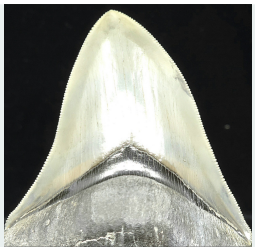
Moderate wear or noticeable chips

E3 Very good



Minor wear or tiny chips

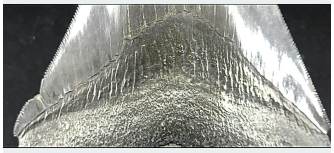
E4 Excellent



Complete enamel, no defects

BOURLETTE (B)

B1 Poor



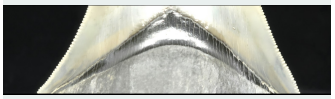
Severe erosion or reconstruction

B2 Good



Moderate wear or partial texture loss

B3 Very good



Minor wear; texture mostly intact

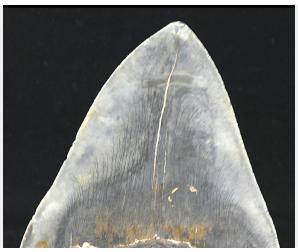
B4 Excellent



Fully preserved texture and color contrast

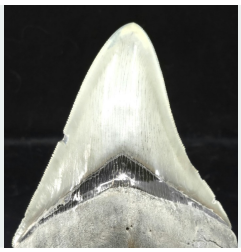
SERRATIONS (S)

S1 Poor



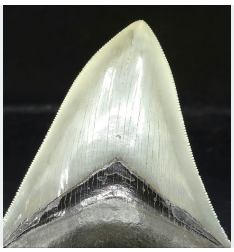
Serrations mostly absent or damaged

S2 Good



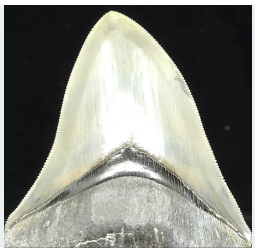
Noticeable serration wear

S3 Very good



Minor wear; most serrations intact

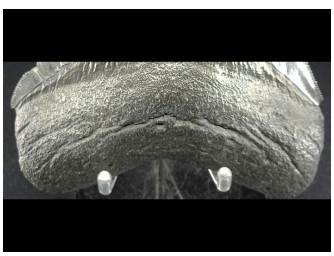
S4 Excellent



Complete and sharp across the edge

ROOT (R)

R1 Poor



Significant loss, broken lobes or restoration

R2 Good



Moderate wear, damage or weathering

R3 Very good



Minor wear; root and lobes mostly intact

R4 Excellent



Complete root, sharp lobes, clear nutrient groove

Excellent: no visible defects. Very good: minor imperfections. Good: moderate wear. Poor: heavy wear.

FOSSIL SHARK TOOTH

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2 OVERALL CONDITION SCORE

Score	Grade	Base value / inch
15-16	Museum Grade (MG)*	Locality based
13-14	Collector Grade A	$700-$900
10-12	Collector Grade B	$500-$700
8-9	Commercial Grade A	$200-$400
7	Commercial Grade B	$200
Below 7	Commercial Grade C	$100 or less

Score = E + B + R + S. Maximum: 16. E4-B4-R4-S4 = 16.
*Museum qualification also follows the locality minimums below.

3 LOCALITY RARITY SCALE & MUSEUM BASELINES

Class	Description	MG minimum	Price / inch
L1	Common	15	$1,000
L2	Uncommon	14	Up to $1,500
L3	Rare	13	Up to $2,000
L4	Exceptional	12	$3,000+

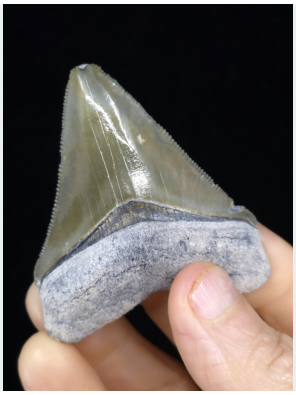
4 COLOR PREMIUM SCALE



WHITE



RED



GREEN

Class	Description	Value impact
CP0	Common coloration	No premium
CP1	Unusual coloration	Minor premium
CP2	Rare coloration	May qualify for L2 pricing
CP3	Exceptional coloration	Significant premium above locality value

Rare colors may elevate an L1 specimen to L2 pricing.

FOSSIL SHARK TOOTH

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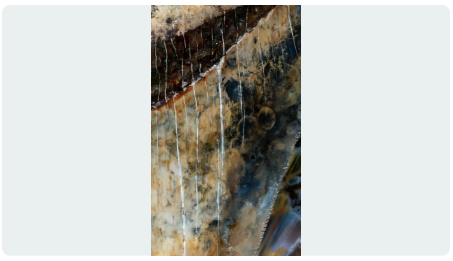
5 PATTERN PREMIUM SCALE



COLOR BANDING



FEATHERING



MARBLING

Class	Description	Value impact
PP0	Standard pattern	No premium
PP1	Noticeable pattern	Minor premium
PP2	Rare pattern	May qualify for L2 pricing
PP3	Exceptional pattern	Significant premium above locality value

PP2-PP3 specimens may qualify for L2 pricing regardless of actual locality.

6 SIZE RARITY PREMIUMS

Rare size thresholds	Size
Hemipristis serra	2 inches+
White shark species	3 inches+
Parotodus benedeni	3 inches+
Otodus angustidens	4 inches+
Otodus megalodon	6 inches+

Class	Description	Value / inch
SR0	Standard size	No premium
SR1	Rare size	~$1,500
SR2	Exceptional size	$3,000-$5,000+ (L3/L4)

Size premiums depend on condition and locality.

7 QUICK VALUATION CHART

Grade	Price / inch
Collector Grade A	$700-$900
Collector Grade B	$500-$700
Commercial Grade A (8-9)	$200-$400
Commercial Grade B (7)	$200
Commercial Grade C (below 7)	$100 or less

RARE SIZE VALUE GUIDE

Example	Price / inch
Rare size specimen	~$1,500
Rare size + rare color	$2,000-$4,000
Rare size + L3 locality	$2,500-$5,000
Rare size + rare color + L4	$3,000-$5,000+

8 QUALIFYING RARE LOCALITIES - L4

L4 - EXCEPTIONAL LOCALITY PREMIUM

These localities are recognized for exceptional rarity, historic significance, limited collecting opportunity, low specimen recovery rates, or legal restrictions that severely limit specimen availability on the international collector market. L4 pricing: $3,000+/inch.

OTHER QUALIFYING L4 LOCALITIES
Denmark
Cuba
Australia
Italy
France
Philippines
Russia
Japan

8 QUALIFYING RARE LOCALITIES - SOURCES

EXPORT-RESTRICTED / EXPORT-PROHIBITED FOSSIL SOURCES

Source-chart classification: Austria, Peru, Chile, Argentina, Malta, New Zealand and Mexico.

The original guide attributes scarcity to export restrictions and limited international availability. Country listings are reproduced from the supplied guide; they are not a current legal determination.

LOCALITY UPGRADE RULE

Rare colors (CP2-CP3) or rare patterns (PP2-PP3) from recognized color-producing localities may qualify for L2 pricing regardless of the locality's normal classification.

SCARCITY RULE

Documented lawful collection and export history should accompany specimens from restricted sources. Follow applicable collecting and export requirements.

8 QUALIFYING RARE LOCALITIES - L2

L2 - RARE COLOR PRODUCING LOCALITIES

Known for uncommon colors and exceptional patterns. Museum Grade specimens with verified rare colors or patterns may qualify for L2 pricing (up to $1,500/inch).

Locality	Premium characteristic
Meherrin River (North Carolina, USA)	White, green, and multicolor specimens
Suwannee River (Florida, USA)	White and rare mineralized colors
Flint River (Georgia, USA)	Distinctive greens, blues, and grays
Fire Site (Various locations)	Unusual color preservation and mineralization

9 EXAMPLE CERTIFICATION

Condition: E4-B4-R4-S4 | **Grade:** Museum Grade
Locality: L3 (Rare) | **Color:** CP3 (White)
Pattern: PP2 (Rare Pattern) | **Size:** SR2

ESTIMATED MARKET VALUE

$18,750-$31,250+

$3,000-$5,000+ per inch
E4-B4-R4-S4 / MG / L3 / CP3 / PP2 / SR2

10 APPLICABILITY & SPECIES COVERAGE

Fully applicable: **Otodus megalodon, Otodus angustidens, Otodus chubutensis.** Smaller species qualify for exceptional-specimen premiums at: Hemipristis serra 2 inches+, white shark species 3 inches+, Parotodus benedeni 3 inches+. Below these thresholds, use condition grading; premium valuation multipliers may not apply. Smaller species remain subject to market supply and demand.

IMPORTANT NOTES

Prices are estimates influenced by demand, provenance, preparation and desirability. Document condition and authenticity. This guide does not guarantee value. Combine it with collector judgment.

PHOTOGRAPHY TIPS

Use natural light. Photograph front, back, side and close-up views. Show serrations and details. Use high-resolution images for accurate grading.

ENAMEL GRADING

Evaluating surface preservation in fossil shark teeth

Enamel grades describe how well the enamel surface is preserved. Assess its luster, scratches, divots and erosion, and observe how reflected light moves across the surface as the tooth is slowly rolled beneath a light.

E4

EXCELLENT

Highest quality enamel preservation

The highest enamel grade in this system. The enamel has a smooth, continuous light-roll effect, with no scratches, divots or other damage to the enamel surface.

E3

VERY GOOD

High luster with minor surface damage

The enamel retains high luster and strong surface preservation, but minor damage is present. Small scratches, divots or other limited surface defects distinguish E3 from an undamaged E4 surface.

E2

GOOD

Minimal luster with extensive scratching

The enamel has minimal luster and many surface scratches. As the tooth is rolled beneath a light, these scratches interrupt the reflection, creating the appearance of light becoming trapped rather than moving smoothly across the surface.

E1

POOR

Highly eroded enamel with no luster

The enamel surface is highly eroded, leaving only lower or subsurface enamel layers exposed. These remaining layers are extensively scratched and damaged, with no remaining luster.

HOW TO CHECK THE LIGHT-ROLL EFFECT

Slowly tilt or roll the tooth beneath a steady light and examine the entire enamel surface. Look for a smooth moving reflection, then note any interruptions caused by scratches, divots or erosion. High luster alone does not qualify a damaged surface for E4.

Enamel (E) evaluates surface preservation; root, bourlette and serrations are graded separately.

BOURLETTE GRADING

Evaluating surface preservation and continuity in fossil shark teeth

Bourlette grades assess surface preservation, hydration cracking, material loss and continuity at the enamel joint. Examine the full bourlette and estimate the affected area as a percentage of its total surface area.

B4

EXCELLENT

Intact surface and seamless continuity

No surface scratches, hydration splits or separation between the bourlette and enamel are present. The bourlette flows seamlessly from the bottom of the root through to its contact with the enamel.

B3

VERY GOOD

Minor issues affecting no more than 4%

Minor surface issues may be present, including hydration cracking and minor separation along the joint between the bourlette and enamel. No more than 4% of the total bourlette surface area may be affected.

B2

GOOD

Significant missing portions; no more than 30% loss

Significant portions of the bourlette are missing, but total surface area loss does not exceed 30% of the bourlette. Assess the missing portions relative to the full bourlette area.

B1

POOR

More than 50% missing or severely damaged

The majority of the bourlette - more than 50% of its total surface area - is missing or severely damaged by erosion or wear.

GRADING BOUNDARY TO CLARIFY

These definitions leave some cases unassigned: more than 30% through 50% surface area loss, and damage affecting more than 4% without significant material loss. Additional thresholds are needed to classify these cases consistently.

Bourlette uses the B code; enamel (E), serrations (S) and root (R) are graded separately.

SERRATION GRADING

Evaluating blade-edge preservation in fossil shark teeth

Serration grades describe the preservation of the small cutting points along the blade edges. Assess how many serrations are damaged, the severity of that damage, and whether wear or erosion affects extensive lengths of the blade.

S4

EXCELLENT

Fully intact serrations with translucent edges

All serrations are fully intact. Translucency is present along the outer edges of the enamel bordering the serrations. This is the highest serration grade in the system.

S3

VERY GOOD

Up to five partially damaged serrations

A few serrations may show partial damage, but no more than five are partially damaged. Inspect the blade edges carefully to identify and count the affected serrations.

S2

GOOD

Six or more damaged serrations

Six or more serrations are damaged. Inspect the blade edges carefully and count the affected serrations to identify this classification.

S1

POOR

Extensive damage or loss from wear and erosion

Serrations are severely damaged along extensive lengths of the blade, or may be absent because wear and erosion have removed them.

HOW TO INSPECT SERRATIONS

Inspect the full length of both blade edges under good lighting. Count damaged serrations and note whether damage is partial, severe or widespread. Check for translucent enamel edges when assessing S4, and extensive erosion or loss when assessing S1.

Serrations use the S code; enamel (E), bourlette (B) and root (R) are graded separately.

ROOT GRADING

Evaluating root completeness, texture and surface preservation

Root grades assess overall preservation, the original outer surface (described here as bone skin), surface texture, nutrient pores, hydration cracking and gouges. Examine the entire root when assessing preservation and surface loss.

R4

EXCELLENT

Fully intact; highest overall root preservation

The root is fully intact, with no gouges, missing surface bone, texture loss or hydration cracking. All nutrient pores are present, and the original outer surface and texture are preserved.

R3

VERY GOOD

Detailed definition pending clarification

Provisional criteria: some hydration cracking and minimal loss of outer bone skin. The definition and allowable limits remain unconfirmed; this entry is not yet a finalized grading standard.

R2

GOOD

Extensive hydration cracking; up to 20% surface loss

The root may have extensive hydration cracking and some loss of its outer bone skin. Loss must not exceed 20% of the overall bone-skin surface area.

R1

POOR

Complete loss of original surface bone skin

All surface-level bone skin is lost, leaving none of the original texture or outer appearance intact. Major hydration cracks are present. Small gouges in the root may or may not be present.

CRITERIA TO CLARIFY

R3 requires a finalized definition. The supplied criteria also do not yet assign roots with more than 20% but less than complete loss of the outer bone skin. These cases need clarification before consistent grading is possible.

Root uses the R code; enamel (E), bourlette (B) and serrations (S) are graded separately.