## **LEUPOLD & STEVENS, INC. IS A PROUD SPONSOR** OF THESE AND OTHER FINE ORGANIZATIONS:

Association, Audubon Society of Portland, Birders' Natural Resources Defense Council, Royal Society for

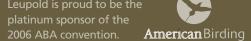
















## TITLE SPONSOR OF OREGON **CASCADES BIRDING TRAIL**

The Oregon Cascades Birding Trail is a network of prime birding destinations linked by existing highways and routes traversing the Eastern and Western Cascades, showcasing the region's spectacular scenery and wildlife for birders from around the globe. The routes, which include over 100 prime birding sites, are linked by crossings throughout, as well as the Columbia Gorge at the south. Leupold & Stevens, Inc. is very proud to have joined with the American Bird Conservancy and the National Forest Foundation as a title sponsor of such an important and forward-looking project as this. For more information on the Oregon Cascades Birding Trail,

members of the Audubon Society of Portland, Oregon Field Ornithologists, and Oregon Birders On-Line who volunteered their time to provide the photographs for like them around the world that we are committed to providing the best possible optics and optical

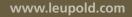
## LEUPOLD VIRGINIA SOCIETY OF ORNITHOLOGY **ROVING RAVENS BIRDING TEAM:**



LEUPOLD

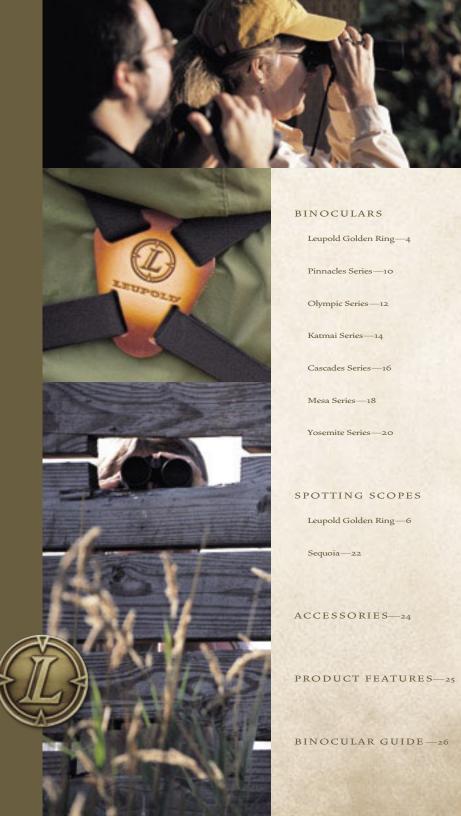


Robert Ake, Alan Schreck Kurt Gaskill





Nature draws us in. It pulls us, beckoning us ever forward to take it all in. Of course, many of the things we find most beautiful...the birds and animals...often prefer to keep us at a respectable distance. That's where Leupold® comes in, with the optics and observation tools that bring it all closer course you can count on your Leupold optics to outdoors enjoyment. It's time to get closer than nature intended, with Leupold optics.



## At Leupold<sup>®</sup>, Birding is in Our Blood

Leupold & Stevens, Inc., a fifth-generation, family-owned company in Beaverton, Oregon, has a long history of birding enthusiasts in our ranks, all the way back to Norbert Leupold Sr. We enjoy birding as much as you do, and we proudly sponsor many great birding groups, as well as supply optics that will help you get the most out of birding.

We also believe birding should be open to all, and we know not everyone has unlimited resources to purchase optics. That's why we created the Leupold® Green Ring™ line. We design them using our nearly 100 years of experience of bringing the highest-performing, most rugged, reliable optics products to our customers.

Their Green Ring means that what you see through them will be bright and crystal clear, with superb color fidelity, no matter what the light or weather conditions (indispensable attributes when trying to identify an uncooperative bird). Plus they're built durable, filled with nitrogen and sealed against moisture — a process Leupold pioneered — so they'll be 100 percent waterproof and fog proof. Finally, they're covered by the Leupold Green Ring Limited Lifetime Warranty.

Our Golden Ring® optics are designed and assembled at our Beaverton, Oregon, factory. The distinctive Golden Ring is your guarantee that they'll give you legendary Leupold ruggedness, absolute waterproof integrity, and outstanding optical performance. They're covered by the Leupold Full Lifetime Guarantee, the best consumer protection in the industry.

In short, we put 100 years of optics and birding experience in the palm of your hand.



Norbert Leupold Sr., son of Leupold & Stevens founder Fred Leupold and seven-term president of the Oregon Audubon Society (now Audubon Society of Portland), along with John Scharff, Harold Moulton, and then president of the National Audubon Society Carl Buckheister, at the dedication of the observation blind at Malheur National Wildlife Refuge in 1960. The blind was dedicated to the renowned wildlife conservationist William L. Finley and the noted wildlife photographer Herman T. Bohlman in honor of their 1908 and 1912

## New for 2006

New! Leupold® Green Ring™ Sequoia™ 20-60x80mm Spotting Scope

The incredible range of magnification and power make this new spotting scope an extremely versatile choice for serious birders.

**New!** Leupold Green Ring Seguoia 20-60x80mm Spotting Scope Kit

spotting scope in a kit that includes a compact tripod and custom carrying case

Our powerful new

New! Leupold Golden Ring® 8x32mm and 10x32mm Binoculars

These 8x32mm and 10x32mm binoculars offer exceptional optics in a smaller, lighter package.

New! Leupold Green Ring Katmai™ Binoculars in Natural

The natural color armor blends well with nearly any surrounding, as well as the khaki gear that naturalists favor.

New! Leupold Green Ring Cascades™ 8x42mm and 10x42mm Internal Focus Porro Prism Binoculars

New internal focus mechanism makes them smaller and more comfortable to use than ever New! Leupold Green Ring Yosemite™ 6x30mm Binoculars in Black, Red, or Natural

A wonderful combination of performance and features make this an ideal binocular for anyone in the family, from novice birders to experts.

**New!** Brown Binoculars and Spotting Scopes

Starting in 2006, Leupold Golden Ring binoculars and spotting scopes will feature our new signature color,





## LEUPOLD GOLDEN RING®

INOCULARS



When we introduced Leupold Golden Ring binoculars last year, we seriously raised the bar for optical performance. We're doing it again for 2006 with two new models — the

8x32mm and 10x32mm — that give you even more versatility than before. The key to these optics' performance is

Leupold's exclusive Index Matched Lens System<sup>™</sup> Each lens coating is matched specifically to the type of glass and the lens placement in the binocular. The result is a standard of brightness, clarity, and color fidelity like you've never seen before. For sensing those subtle variations of color and shade, or pulling out crucial details for a positive ID, these are the binoculars

GOLDEN-WINGED WARBLER

The beautiful Golden-winged

Warbler frequently hybridizes with

the Blue-winged Warbler to create

either the "Brewster's Warbler" or the

less common "Lawrence's Warbler."

(VERMIVORA CHRYSOPTERA)

Interpupillary Distance Lock (IPD) — lock in the distance between your eyes, so no adjustments are necessary during use. You can easily use your binoculars one-handed.

Phase coated prisms — super reflective prism coatings work with the lens system to eliminate diffraction and ensure peak clarity.

Superb close focus — with close focus distances as near as 4.9 feet, even butterflyers can use these outstanding binoculars.

Index Matched Lens System<sup>™</sup> extraordinary light transmission, and incredible brightness,

clarity, contrast and color fidelity. signature color for all Golden Ring observation products. Generous eye relief and twist-up, retractable

Leupold's signature brown armor coating —

these binoculars feature Leupold's new

eyecups — easy and comfortable to use with glasses or without.

**Ergonomic design** — easy to grip, with a good in-hand fit, they actually become more comfortable the longer you hold them.

Wider perspective — with a field of view of up to 420 feet at 1,000 yards, for quick acquisition of birds on a branch or on the wing.

Rugged, waterproof, guaranteed for life like all Leupold Golden Ring optics, these binoculars will perform in even the worst conditions, and are covered by the Leupold Full Lifetime Guarantee.

Accessories included — your Golden Ring binoculars come with neck strap, case, and custom one-piece eyepiece and objective covers.



## LEUPOLD GOLDEN RING





## S P O T T I N G S C O P E S

## Leupold Golden Ring 12-40x60mm Spotting Scope

Two features make our spotting scope superior to all others. First, mirrors create a 2 1/2-foot light path in a 12.4-inch optic. Second, we use an optical erector system, not a variable magnification eyepiece. The results are plain to see. New for 2006, it features our Leupold signature deep brown armor coating.

Powerful, clear, bright optics — even at 40x, you see a crystal clear image.

Soft-side, form-fitting case included — remains on the scope during use, for extra protection.

Multicoat 4® lens coatings and anti-glare interior — these enhance brightness, clarity, and color fidelity.

Longest eye relief of any spotting scope on the market.

## Leupold Golden Ring 12-40x60mm HD Spotting Scope

We gave this optic all the performance advantages of our conventional 12-40x60mm spotting scope, then added a fluoridebased High Definition lens and our Index Matched Lens System. It takes clarity, color fidelity, and brightness to levels you've never see page 24 for seen before. New for 2006, it features our Leupold signature brown armor coating.

lens is more than eco-friendly...it offers substantially enhanced resolution, color, and contrast, especially at 40x. In other words, the subtle color variations and physical features that differentiate species just became easier to identify.



The Index Matched Lens System — along with folded light path technology and the optical erector system, it maximizes total light transmission for a sight picture that's unbelievably bright and sharp.

Digital camera compatibility more information.

30mm of constant eye relief — The HD lens — this fluoride-based objective — no scope on the market can match it.

> Soft-side, form-fitting case — in brown, it provides extra protection and can remain on the scope during use. Included with the HD spotting scope.

## Leupold Golden Ring 12-40x60mm HD Spotting Scope Kit

This valuable kit includes the HD spotting scope, Leupold compact tripod, window mount, and digital camera adapter, all in a hard-side case.



BOTTERI'S SPARROW

While it is possible to

distinguish the Botteri's

Sparrow from its fellow Aimophila

genus member, the Cassin's Sparrow,

most prudent birders rely upon song

to identity one from the other.

(AIMOPHILA BOTTERII)

GOLDEN RING 12-40х6омм HD KIT





## LEUPOLD GOLDEN RING®





COMPACT SPOTTING SCOPES

Absolute ruggedness, total waterproof integrity, lightweight construction, and impeccable optical quality. You get everything you're looking for in a Leupold Golden Ring Compact spotting scope, and in a smaller, lighter package than you would expect. We don't believe you should have to sacrifice, so we sacrificed nothing in their design and construction. Our attention to detail has resulted in compact scopes that are rugged, absolutely waterproof, and guaranteed for life to work flawlessly in all conditions. New for 2006, all Leupold Golden Ring observation products feature our new signature dark brown armor coating. It will help you blend into your surroundings, even as your Leupold Golden Ring optics stand apart.

RHINOCEROS AUKLET

(CERORHINCA MONOCERATA)

Pacific Ocean.

Easily identifiable by its "horn" while

in breeding plumage, the Rhinoceros

Auklet molts its namesake marking in

winter and is often misidentified when

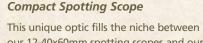
seen swimming in the waters of the

## Leupold Golden Ring 10-20x40mm Compact Spotting Scope

Just 15.8 oz and 7.5" long — it's powerful, yet so lightweight and compact that you can wear it around your neck or carry it in a belt or backpack.

**Use handheld or mounted** — it is perfectly balanced for your hand, or you can mount it on most standard tripods, monopods, or window mounts.

Standard multicoat lens coatings — Leupold's own proprietary lens coating system optimizes light transmission for a crisp, bright picture with excellent contrast and color fidelity.



Leupold Golden Ring 15-30x50mm

our 12-40x60mm spotting scopes and our 10-20x40mm Compact spotting scope.

Just 21.5 oz and 11" long — this spotting scope is powerful, yet lightweight enough to take anywhere.

## Standard multicoat lens coatings —

Leupold's own proprietary lens coating system optimizes light transmission for a crisp, bright picture with excellent contrast and color fidelity.

## Leupold Golden Ring 15-30x50mm Compact Spotting Scope Kit

With this kit, you get the Leupold Golden Ring 15-30x50mm Compact spotting scope, quick-detaching shoulder strap, custom padded belt case, lens covers, a specially designed mounting adapter that fits any 1/4-20 threaded mount (includes sturdy tabletop tripod), and a hard-side carrying case.







## KATMAI SERIES



BINOCULARS



Also known as the Cosmopolitan due to its world-wide abundance, the Painted Lady is known to have over 100 possible host plants, including thistles, hollyhock, mallow, and various legumes.

Leupold Green Ring Katmai™ Series binoculars give you all the performance of a full-size binocular in a compact package that's lightweight, and easy to carry or pack. The key is the Katmai's 32mm objective lens and new, phase and L-coated prisms that work together to transmit a greater amount of light to your eye than traditional compacts, which usually employ a much smaller objective lens. New phase coated prisms aren't the only change you'll see in the Katmai this year. We're excited to introduce a new, natural armor color that blends easily into most surroundings, and even complements the khaki gear naturalists prefer to use in the field.

lenses give you the light transmission of full-size binoculars in a compact body. Phase and L-coated prisms, and fully multicoated lenses — the trademark of a high-quality optic, phase coat is combined with L-coat, Leupold's own 64 layer, anti-reflective coating. Together, they are superbly effective in improving image

**32mm objective lenses** — these full-size

Close focus distance — crystal clear focusing at a mere 4.9 feet makes them a superb choice for close-up viewing (butterflyers will

resolution. Multiple lens coatings also work

to enhance light transmission and brightness.

Clear, bright sight picture — the 32mm objective lenses, multi-coated lenses, and phase and L-coated prisms work together to provide you with a vivid, bright sight picture with excellent true color.

Ergonomic, compact design — they fit all hand sizes, and their small size makes the Katmai easy to carry or stow in a waistpack.

Twist-up eyecups and generous eye relief the Katmai is comfortable to use, even with glasses, for extended periods.

Built rugged and absolutely waterproof they're built to last, waterproof, and fog proof, no matter what the weather brings.

Tough rubber armor — this gives you extra protection from knocks and falls, and also enhances your grip in wet conditions.







## YOSEMITE SERIES







BINOCULARS



Emily Dickinson described the oriole as "A Pleader — a Dissembler / An Epicure — a Thief / Betimes an Oratorio / An Ecstasy in chief."

Those who have spent time watching these birds understand exactly what she meant.

The new Leupold Green Ring Yosemite™ 6x30mm binocular is an ideal optic for everyone and anyone in the family.

Through our contact with birders and other outdoor enthusiasts, we realized that full-size binoculars can be too large and too powerful for many people, especially younger users, taking away from their outdoor experience.

The Yosemite is specifically designed to meet everyone's needs — from the most inexperienced or youthful user, to experienced adults — and still provide the kind of optical performance demanded by serious birding enthusiasts.

Small, lightweight and comfortable — fits hands of all sizes, children to adults.

Smaller interpupillary distance settings — accommodates a wider range of users, young, old, or in between.

**6x magnification** — this gives you an ideal combination of power and field of view. Even novice users will find it easy to spot and follow birds and wildlife, even while on the move.

Forgiving eye relief — another must for novice users, it makes extended viewing comfortable, even while wearing glasses.

Multi-coated optics — ensures a sharp, bright sight picture with the contrast and color fidelity you need to make positive IDs.

Rugged and absolutely waterproof — these are serious outdoor optics, 100 percent field ready.

Durable, rubber armor coating — available in black, natural or red, the Yosemites are just as at home in the woods, at the game, or anywhere you need serious outdoor optics.

Covered by the Leupold Green Ring Limited
Lifetime Warranty — the Yosemites are
ready for a lifetime of outdoor fun and
excitement.









# SEQUOIA







#### TUFTED PUFFIN (Fratercula cirrhata)

Instead of building a nest, the Tufted Puffin excavates one, digging a burrow that may be as deep as nine feet into a turf-covered seaside slope.

## Leupold Green Ring Sequoia™ 15-45x60mm Spotting Scopes

Two models — choose from a straight eyepiece or a 45° angled eyepiece model.

Versatile magnification — you'll see excellent detail at all practical distances.

Fully multi-coated optics — deliver superb brightness, clarity, contrast, and color.

Comfortable viewing — long eye relief and a twist-up eyecup make for comfortable viewing, even with glasses.

Rugged, armored, and waterproof.

Covered by the Leupold Green **Ring Limited Lifetime** Warranty. ANGLED SKU #54534

## New! Leupold Green Ring Sequoia™ 20-60x80mm Spotting Scopes

Two Models — available with a straight eyepiece or a 45° angled eyepiece for viewing in any position.

Huge magnification range — incredible flexibility and capability, with wide field

Outstanding optics — fully multi-coated lenses ensure high photopic transmission, for excellent resolution, contrast, and brightness.

Rotating tripod mount — for versatility

Extendable lens shade — helps eliminate glare.

Focus dial — placed atop the scope for easy adjustment while viewing.

Comfortable viewing — the twist-up eyecup and generous eyebox make extended viewing a pleasure, even with eyeglasses.

Rugged, armored, and waterproof.

STRAIGHT SKU #61130

ANGLED SKU #61155 (NOT SHOWN)

Covered by the Leupold Green Ring Limited Lifetime Warranty.

## Sequoia™ Spotting Scope Kits

Everything you need to head into the field:

Sequoia spotting scope — straight or angled eyepiece models available.

Adjustable tripod — multi-directional, tilting head for easy movement and flexibility; multi-section, adjustable legs with non-slip rubber feet; lightweight, compact design.

**Protective case** — reinforced case with foam padding and a carrying handle.



STRAIGHT SKU #55886 Angled SKU #55888

NEW SEQUOIA 20-60x80MM KIT STRAIGHT SKU #61135 ANGLED SKU #61160

## ACCESSORIES

## Leupold Digital Camera Adapter for Spotting Scopes

Capture images of wildlife or any outdoor event using this adapter, your digital camera, and the Leupold Golden Ring 12-40x60mm spotting scope. The adapter itself snaps onto any digital camera with a 58mm lens. With the plates included with the kit, you can convert the adapter to fit 28mm, 37mm, 43mm, and 52mm digital



#### **Leupold Window Mount**

For rock-steady viewing from your vehicle, use the window mount with nearly any spotting scope. Includes a detachable mounting plate that's interchangeable with Leupold tripods, so you can make a quick switch from vehicle to field viewing.





#### **Leupold Binocular Tripod Adapter**

With the binocular tripod adapter, you can enjoy the same steady view with your binoculars that's normally reserved for spotting scopes. Fits Mesa, Pinnacles, and Olympic 8x42mm models.





#### **Leupold Compact Tripod**

When a full-size tripod is just "too much equipment" to take into the field, our compact tripod gets the job done. The 4-section legs extend to 31.5" and collapses to a mere 15". The adjustable ball head with quick-release base gives you incredible viewing versatility.



## Leupold Quick Release Binocular Harness

Even the lightest binoculars can get heavy after hours of hanging around your neck. Now, with the quick release binocular harness, the weight is taken off your neck and evenly distributed across your back through the "X"-shaped design of the strap, keeping

your binoculars close to your body to prevent swinging yet ready at hand at a moments notice.





SKU #55895

## PRODUCT SPECIFICATIONS

	SPECIFICATIONS														
NEW PRODUCTS ARE SHOWN IN RED	Actual Magnification	Linear Field of View		Angular Field of View	Weight		Length		Objective Aperture	Twilight Factor	Exit Pupil	Eye Relief	Interpupillary Distance	Close Focus Distance	
		ft/1000 yd	m/1000 m	degrees	ounce	gram	inches	mm	mm		mm	mm	mm	ft	m
Leupold Golden Ring Binoculars															
8x32mm	8x	420	140	8.0	27.0	765	5.2	132	32	16.0	4.0	17.5	56 - 72	4.9	1.5
10x32mm	10x	356	119	6.8	27.1	768	5.2	132	32	17.9	3.2	14.7	56 - 72	4.9	1.5
8x42mm	8x	381	127	7.3	33.1	938	6.0	152	42	18.3	5.3	16.5	56 - 72	7.0	2.1
10x42mm	10x	340	113	6.5	33.8	958	6.0	152	42	20.5	4.2	16.0	56 - 72	7.0	2.1
eupold Golden Ring Spotting Se	copes														
10-20x40mm Compact	10.0x - 19.9x	199 - 136	66 - 45	3.8 - 2.6	15.8	447	7.5	191	40	20.0 - 28.3	4.0 - 2.0	18.5 - 17.2	NA	5.5	1.7
15-30x50mm Compact	15.2x - 30.4x	136 - 89	45 - 30	2.6 - 1.7	21.5	610	11.0	279	50	27.6 - 39.0	3.3 - 1.6	17.5 - 17.1	NA	13.5	4.1
12-40x60mm	12.7x - 38.1x	168 - 52	56 - 18	3.2 - 1.0	37.0	1049	12.4	315	60	26.8 - 48.9	4.8 - 1.5	30.0 - 30.0	NA	36.0	11.0
12-40x60mm HD	12.7x - 38.1x	168 - 52	56 - 18	3.2 - 1.0	37.0	1049	12.4	315	60	26.8 - 48.9	4.8 - 1.5	30.0 - 30.0	NA	36.0	11.0
Leupold Green Ring Pinnacles Se	ries Binoculars														
8x42mm	8x	341	114	6.5	23.0	652	5.5	138	42	18.3	5.3	17.8	60 - 70	6.6	2.0
10x42mm	10x	267	89	5.1	25.0	708	5.5	138	42	20.5	4.3	16.5	60 - 70	6.6	2.0
eupold Green Ring Olympic Ser.	ies Binoculars														
8x25mm Compact	8x	273	91	5.2	14.8	420	4.9	124	25	14.1	3.1	16.5	60 - 70	8.2	2.5
10x25mm Compact	10x	262	87	5.0	14.8	420	4.9	124	25	15.8	2.5	15.5	60 - 70	9.8	3.0
8x42mm	8x	325	108	6.2	21.8	619	5.7	146	42	18.3	5.3	18.0	60 - 70	7.5	2.3
10x50mm	10x	262	87	5.0	25.7	728	6.7	170	50	22.4	5.0	18.0	60 - 70	10.5	3.2
12x50mm	12x	252	84	4.8	25.7	730	6.6	167	50	22.5	4.0	15.5	60 - 70	13.1	4.0
Leupold Green Ring Katmai Seri	es Binoculars														
6x32mm	6x	425	142	8.1	18.2	515	4.1	105	32	13.9	5.3	19.2	57 - 72	4.9	1.5
8x32mm	8x	335	112	6.4	18.9	535	4.1	105	32	16.0	4.0	15.9	57 - 72	4.9	1.5
10x32mm	10x	272	91	5.2	18.2	515	4.1	105	32	17.9	3.2	10.2	57 - 72	4.9	1.5
Leupold Green Ring Cascades Se	ries Binoculars														
8x42mm	8x	341	114	6.5	22.9	650	5.5	140	42	18.3	5.0	18.0	58 - 72	9.9	3.0
8x42mm Internal Focus Porro Prism	8x	336	110	6.4	24.9	706	5.0	127	42	18.3	5.25	18.0	56 - 73	10.8	3.27
10x42mm	10x	267	89	5.1	23.1	656	5.5	140	42	20.5	4.0	16.0	58 - 72	9.9	3.0
10x42mm Internal Focus Porro Prism	10x	272	90	5.2	25.4	720	5.0	127	42	20.5	4.2	16.0	56 - 73	11.1	3.36
Leupold Green Ring Mesa Series	Binoculars														
8x23mm Compact	8x	336	112	6.4	13.2	375	4.2	107	23	13.5	2.5	9.0	60 - 70	9.8	3.0
10x23mm Compact	10x	262	87	5.0	13.2	375	4.2	107	23	15.2	2.0	9.0	60 - 70	9.8	3.0
8x42mm	8x	341	114	6.5	26.5	750	5.2	132	42	18.3	5.0	18.0	60 - 70	16.4	5.0
10x50mm	10x	288	96	5.5	32.3	917	6.5	166	50	22.4	4.9	18.0	60 - 70	29.5	9.0
eupold Green Ring Yosemite Se	ries Binoculars														
6x30mm	6x	420	140	8.0	17.0	482	4.6	117	30	13.4	5.0	20.0	50 - 70	16.4	5.0
Leupold Green Ring Sequoia Spo	tting Scop <u>es</u>														
15-45x60mm	15x - 45x	131 - 63	44 - 21	2.5 -1.2	35.1	995	13.0	331	60	30.0 - 52.0	3.9 - 1.3	16.5-13.0	NA	29.9	9.1
15-45x60mm Angled	15x - 45x	131 - 63	44 - 21	2.5 -1.2	35.1	995	12.5	317	60	30.0 - 52.0	3.9 - 1.3	16.5-13.0	NA	29.9	9.1
20-60x80mm	20x - 60x	99.6 - 33.2	30 -10	1.9 - 0.09	62.8	1780	15.9	400	80	40.0 - 69.3	3.9 - 1.3	19.9 - 15.0	NA	30	9.14
20-60x80mm Angled	20x - 60x	99.6 - 33.2	30 -10	1.9 - 0.09	62.8	1780	15.9	317	80	40.0 - 69.3	3.9 - 1.3	19.9 - 15.0	NA NA	30	9.14

# LEUPOLD GOLDEN RING SPOTTING SCOPE FEATURES



- B-COOKE TRIPLETT VARIATOR LENS GROUP: Designed to correct all five primary aberrations and two primary chromatic aberrations.
- C-IMAGE COMPENSATOR LENS GROUP: Designed to preserve the image location while varying magnification.
- D-HIGH TRANSMISSION MIRROR: Folding light path for compact housing.
- E- OBJECTIVE LENS GROUP: Designed to optimize light transmission, FOV, and image quality.



Ian Lewington, whose bird illustrations are featured in this catalog, is a freelance bird illustrator living in Oxfordshire, England. A member of the British Ornithological Union Records Committee and an identification consultant to Birding World, Ian's artwork can be seen in many noted publications and books, including Rare Birds of Britain and Europe, Auks of the World, and Birds of the World (Lynx).

www.ian-lewington.co.

Richard Lewington, whose butterfly illustration is featured on page 15, is a freelance wildlife illustrator living in Oxfordshire, England. His artwork can be seen in many noted publications and books, including the New Collins Field Guide to Butterflies of Britain and Europe, Pocket Guide to the Butterflies of Great Britain and Ireland, Field Guide to the Dragonflies and Damselflies of Great Britain and Ireland, and Field Guide to the Moths of Great Britain and Ireland.

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## WHICH BINOCULAR IS BEST FOR ME?

When choosing the right binocular for you, many things need to be considered. What you are doing, what you are watching, and where you are watching it. It's also important to consider a few things about yourself. Do you wear eyeglasses? Do you have small or large hands? How old are you? Have you ever had trouble in the past fitting a binocular to your eyes' interpupillary distance so that you saw one single picture rather than two partial circles?

With all this in mind, we've put together a few product profiles that should make choosing the right binocular for you easier.

#### General purpose binoculars

Let's face it - sometimes it's just nice to have a binocular on hand. It may not be for any specific purpose. It may simply ride in the vehicle glove box or sit on a home window sill. You can take it to the game or on that vacation in the mountains. Often in such cases, the primary users of the binocular might not be what would be called "intensive" optic users, thus a lower magnification level will make it easier to use by those less accustomed to locating an object through an optic. As the binocular may not be frequently used, keeping the purchase price to a fairly modest level is often a factor in the choice. Therefore, something fairly straight-forward and easy to use by a wide range of people is the best idea.

## Will children be the primary users of the binocular?

There are a few too seldom considered facts about selecting binoculars for use with children. First, while there are inexpensive toy binoculars on the market, they should not under any circumstance be used by children for any lengthy amount of time viewing anything; the strain placed upon the eyes is simply too great.

Second, children (and for that matter, many adults – both men and women) have an interpupillary distance (abbreviated IPD – the measurement between the pupil of one eye and the pupil of the other to which the two halves of a binocular must be aligned by the hinge if a single binocular image is to be seen through the optic) that is too small for compatibility with ordinary binoculars. While 60mm to 70mm is often the standard range, even 60mm is not reached by many young people until their teen years and others never reach it at all. Overall physical size is not a factor here – some six foot tall adult men do not have an IPD of more than 60mm.

Third, all beginners experience difficulty locating objects in the field through a binocular. Think about it – the optic is magnifying the image 8x or even 10x larger than it normally appears, with the subsequent limitation of field of view occurring at the same time. There are simply too few points of reference in the field for a beginner to quickly locate a reference point and move from it to the object desired to be in view. This is solved by lowering the magnification level and allowing the field of view to be wider.

Fourth, smaller hands require a smaller overall binocular body to allow the controls to be easily reached and manipulated. (This same smaller body is also very useful if gloves are being worn on an otherwise average-size hand.)

Finally, never, ever use compact binoculars with children. Even though it may seem like a good idea due to the smaller size of compacts, the magnification levels are too high and the objective diameters are too small, offering a smaller exit pupil, for children to use successfully.

#### Binoculars for birding

Birders are perhaps the most technically demanding of all binocular users. There are

many features that must all be found in a single binocular to allow it to be considered a truly great birding binocular. While there may be a dispute among some, most birders agree that a a PFD. great birding binocular must have a close focus distance of no more than 10 feet. It must also allow the perception of the image with no perceptible alteration of color. Resolution must be very sharp (sharp enough to distinguish the difference between the tail feathers of Allen's and Rufous Hummingbirds). Field of view is also important, as identification on the wing is often necessary. While 8x is generally considered the appropriate magnification, conditions and terrain can alter this rule - viewing off-shore from a sea cliff would certainly allow for use of more than 8x while close vegetation in a tropical jungle may render 8x too much.

#### Binoculars for butterfly watching

A crucial factor for selecting the right binocular for butterfly watching is close focus distance. N.A.B.A. indicates a maximum close focus distance of 10 feet; other experts insist on no more than 5 feet. As butterfly watching is done during mid-day, large objective models are not required. Lower magnification and larger field of view allow for faster location of the butterfly while it is flying.

## Binoculars for hiking and camping

Light in weight, small in size, and durable are the primary desirable features of binoculars well-suited for hiking and camping.

## Binoculars for paddle sports

Even on still water, viewing from a kayak or canoe is still tricky because of the inability to completely stop all movement. Lower magnification and larger relative objective diameter will produce a larger exit pupil and allow more forgiveness for movement. Of course, conservation of size is also important, especially if trying to wear the binocular over a PFD

#### Binoculars for general maritime use

Most powerboats ply active waters that produce a continuous bobbing and rolling. Because of the inability to completely stop all movement, lower magnification and larger relative objective diameter will produce a larger exit pupil and allow more forgiveness for movement.

## Binoculars for stadium sporting events and performances

Larger venues and greater distances from the action would make one think that a 10x50mm or 12x50mm model would be preferred. However, a choice should be made for a model that will offer a clear, sharp image, a wide field of view, and also be small enough and easy to manipulate through the crowds at a sporting event. It should be lightweight enough to use for more than a few minutes and provide a quick focus to follow the action. In addition, when you are struggling through crowds holding a beverage or food, the addition of a bulky pair of binoculars could be the last thing you want to take with you.

## Binoculars for theater concerts and performances

Even though styles are more relaxed in many places, most people still tend to dress up for theater performances and concerts. Because of this, a small binocular that is easy and unobtrusive to carry, and that provides a good clear image, even after the lights are dimmed, is preferred.

#### Optics for special visual difficulties

There are many circumstances that occur in the normal course of human physiology that prevent full utilization of conventional binoculars. These may be as distinct as the loss of vision in one eye, or more subtle, such as glaucoma, macular degeneration or a non-tracking eye. They may even be the normal loss of pupillary dilation common with advancing age. In these circumstances, special consideration should be given to selection of an optic. From our experience here at Leupold, we would offer the following suggestions for some situations we have encountered for which the recommended optic has worked to either eliminate or greatly improve the visual difficulty.

Recommended models for organic eye problems (macular degeneration, etc.) – lower magnification allows for larger exit pupil for maximization of the visual field: Katmai 6x32mm, Yosemite 6x30mm.

Recommended models for loss of vision in one eye or non-tracking eye: Golden Ring 10-20x40mm Compact spotting scope – lighter than a binocular with the added benefit of zoom magnification.

Recommended models for decreased pupillary dilation common with age – lower magnification with relatively large objective allows for maximum exit pupil diameter and can also help with any early tremor that may be present: Katmai 6x32mm, Yosemite 6x30mm.

#### Golden Ring Katmai Series Cascades Mesa Series Leupold Application Guide General Purpose Children / Youth People with Interpupillary Distance (IPD) Less Than 60mm Beginners - Requiring Larger General Field Birding Coastal Birding Tropical Birding . . **Butterfly Watching** • • Hiking and Camping . . . • Paddle Sports General Maritime Use Stadium Sporting Events and . . . • • • • Theater Concert Performances Organic Eye Problems macuar degeneration, etc.) Loss of Vision in One Eye or Non-Tracking Eve Decreased Pupillary Dilation

## THE LEUPOLD GOLDEN RING FULL LIFETIME GUARANTEE

Leupold and Stevens, Inc. is an American, family-owned, fifth-generation company that has been designing, machining, and assembling precision optical instruments in the U.S. for nearly 100 years. Leupold's success has been built on our commitment to your absolute satisfaction and our commitment to building the best high-performance outdoor optics. It's for these reasons that we offer the Leupold Full Lifetime Guarantee.

If any Leupold Golden Ring product is found to have defects in materials or workmanship, we will, at our option, repair or replace it. FREE. Even if you are not the original owner. No warranty card is required. No time limit applies.

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A solid warranty and superior service. Leupold Green Ring optics are engineered and manufactured to standards set and monitored by the design engineers at Leupold's Oregon factory. The goal is to provide you with reliable performance at a reasonable price. Should service ever become necessary, these fine optics are covered by the Leupold Limited Lifetime Warranty. All service work is performed by the same Leupold Product Service Specialists who work on our Leupold Golden Ring products here in Oregon.

If you would like more information regarding the construction or use of your precision-engineered Leupold Green Ring optics, visit our Web site at www.leupold.com.