

Youth Shooting Sports Equipment Guide

Complete Equipment Reference for CMP Programs

Red Dirt Shooting Sports | 2025 Edition

Introduction: Equipment Made Simple

Starting youth shooting sports doesn't require expensive purchases. Most CMP-affiliated programs provide loaner equipment, allowing beginners to learn fundamentals before investing. This guide covers equipment for air rifle, air pistol, and archery programs.

Key Principle: Start with loaner equipment, invest gradually as skills develop.

Air Rifle Equipment

Beginner Level (Ages 8-12, First 6 Months)

Essential Equipment (Usually Provided by Program) - Air Rifle: Crosman Challenger PCP or similar sporter-class rifle - Pellets: .177 caliber wadcutter pellets (7.0-8.5 grain) - Safety Glasses: ANSI Z87.1 rated eye protection - Hearing Protection: Foam earplugs or earmuffs (NRR 22+) - Targets: 10-meter air rifle targets (official CMP targets)

Cost if Purchasing: \$400-\$600 complete beginner package

What to Wear: - Comfortable athletic clothing (no loose sleeves) - Closed-toe athletic shoes with good support - No jewelry or accessories that interfere with shooting

Intermediate Level (Ages 10-15, 6-18 Months Experience)

Upgraded Equipment - Precision Air Rifle: Entry-level match rifle (Daisy Avanti 853, Crosman Challenger) - Shooting Coat: Canvas or synthetic shooting jacket (provides support) - Shooting Sling: Leather or synthetic sling for stability - Shooting Mat: Foam mat for prone position comfort - Pellet Sampler: Test different pellet brands for accuracy

Cost Range: \$600-\$1,200 for intermediate setup

Fit Considerations: - Rifle length of pull adjusted for shooter's arm length - Stock height appropriate for cheek weld - Trigger reach comfortable without stretching

Advanced Level (Ages 13-18, Competitive)

Competition Equipment - Match Air Rifle: Anschütz, Feinwerkbau, or Walther (PCP or spring-piston) - Shooting Jacket: Stiff canvas jacket with padding and support - Shooting Pants: Reinforced canvas pants with knee padding - Shooting Boots: High-top boots with ankle support - Shooting Glove: Padded glove for sling hand - Spotting Scope: 20-60x scope for target analysis - Shooting Stand: Adjustable stand for equipment organization

Cost Range: \$2,500-\$4,500 for elite competition setup

Note: Red Dirt Shooting Sports provides scholarships covering equipment costs for qualified participants.

Air Pistol Equipment

Beginner Level (Ages 10-14, First 6 Months)

Essential Equipment (Usually Provided) - Air Pistol: Crosman 2240 or similar CO2 pistol - Pellets: .177 caliber wadcutter pellets - Safety Glasses: ANSI Z87.1 rated - Hearing Protection: Foam earplugs or earmuffs - Targets: 10-meter air pistol targets

Cost if Purchasing: \$200-\$400 beginner package

Proper Stance: - Stand sideways to target - Shooting arm extended, non-shooting hand in pocket or on hip - Weight balanced on both feet

Intermediate Level (Ages 12-16, 6-18 Months Experience)

Upgraded Equipment - Match Air Pistol: Entry-level competition pistol (Steyr EVO 10, Walther LP400) - Shooting Shoes: Flat-soled shoes for stability - Shooting Glasses: Prescription or non-prescription shooting glasses with blinders - Grip Customization: Custom grip panels or adjustable grip

Cost Range: \$800-\$1,500 for intermediate setup

Advanced Level (Ages 14-18, Competitive)

Competition Equipment - Elite Match Pistol: Steyr LP10, Feinwerkbau P8X, Walther LP400 - Custom Grip: Molded grip fitted to shooter's hand - Competition Shooting Glasses: Adjustable blinders and iris - Shooting Jacket: Light canvas jacket for support - Pellet Testing Equipment: Chronograph and testing supplies

Cost Range: \$2,000-\$3,500 for elite setup

Archery Equipment

Beginner Level (Ages 8-12, First 6 Months)

Essential Equipment (Usually Provided) - Recurve Bow: 15-20 lb draw weight, adjustable - Arrows: Aluminum arrows (6-12 arrows) - Arm Guard: Protects forearm from string - Finger Tab: Protects fingers during release - Quiver: Hip or ground quiver for arrow storage - Targets: 40cm or 60cm target faces

Cost if Purchasing: \$150-\$300 beginner package

Safety Gear: - Arm guard (mandatory) - Finger tab or shooting glove - Closed-toe shoes - No loose clothing

Intermediate Level (Ages 10-15, 6-18 Months Experience)

Upgraded Equipment - Intermediate Recurve: 20-30 lb draw weight - Carbon Arrows: Matched spine and weight - Bow Sight: Adjustable pin sight - Stabilizer: Front stabilizer for balance - Arrow Rest: Adjustable arrow rest - Bow Case: Soft or hard case for transport

Cost Range: \$400-\$800 for intermediate setup

Advanced Level (Ages 13-18, Competitive)

Competition Equipment - Competition Recurve: Olympic-style recurve (30-40 lb draw weight) - Competition Arrows: Matched carbon arrows (12+ arrows) - V-Bar Stabilizer System: Front and side stabilizers - Competition Sight: Precision adjustable sight - Clicker: Draw-length indicator - Bow Stand: Collapsible bow stand - Spotting Scope: For target analysis

Cost Range: \$1,200-\$2,500 for elite setup

Safety Equipment (All Disciplines)

Mandatory Safety Gear

- Eye Protection: ANSI Z87.1 rated safety glasses (clear or tinted)
- Hearing Protection: NRR 22+ foam earplugs or earmuffs
- Closed-Toe Shoes: Athletic shoes with good support (no sandals)
- Appropriate Clothing: No loose sleeves, jewelry, or accessories

Recommended Safety Additions

- First Aid Kit: Personal kit with band-aids, antiseptic, pain reliever
 - Sunscreen: SPF 30+ for outdoor ranges
 - Water Bottle: Stay hydrated during training
 - Hat/Visor: Sun protection for outdoor shooting
-

Equipment Maintenance

Air Rifle and Air Pistol Maintenance

After Every Session: - Wipe down exterior with clean cloth - Check for loose screws or damage - Store in protective case

Monthly Maintenance: - Clean barrel with cleaning rod and patches - Check air pressure (PCP rifles) - Inspect seals and O-rings - Lubricate moving parts (sparingly)

Annual Maintenance: - Professional inspection and tuning - Replace worn seals - Chronograph testing for velocity consistency

Archery Equipment Maintenance

After Every Session: - Inspect bowstring for fraying - Check limbs for cracks or damage - Wipe down bow with clean cloth - Inspect arrows for bends or cracks

Monthly Maintenance: - Wax bowstring - Check arrow nocks and fletching - Tighten all screws and bolts - Inspect arrow rest and sight

Annual Maintenance: - Replace bowstring (or every 3,000 shots) - Professional bow tuning - Replace worn arrow components

Equipment Storage

At-Home Storage

- Secure Location: Locked cabinet or case
- Climate Control: Avoid extreme heat, cold, or humidity
- Separate Ammunition: Store pellets/arrows separately from equipment
- Organized System: Label cases, keep accessories together

Transport Guidelines

- Hard or Soft Cases: Protect equipment during transport
- Secure in Vehicle: Prevent shifting or damage
- Temperature Awareness: Don't leave equipment in hot cars

- Inventory Checklist: Ensure all items packed before leaving

Buying Guide: New vs. Used Equipment

When to Buy New

- Beginner equipment (safety and reliability)
- Competition-grade equipment (precision matters)
- Safety gear (glasses, hearing protection)
- Arrows (structural integrity critical)

When Used is Acceptable

- Intermediate rifles/bows (if inspected by expert)
- Shooting jackets and clothing (if clean and functional)
- Cases and bags (if structurally sound)
- Accessories (sights, stabilizers, if undamaged)

Where to Buy

- CMP Sales: thecmp.org/sales-and-service
 - Authorized Dealers: Champion's Choice, Champions Choice, Pilkington Competition
 - Local Pro Shops: Support local businesses, get expert fitting
 - Used Equipment: CMP forums, local club bulletin boards
-

Equipment Fitting Guide

Air Rifle Fitting

- Length of Pull: Measure from inside elbow to first finger joint, add 1 inch
- Cheek Piece Height: Eye should align naturally with sights
- Butt Plate Angle: Adjust for comfortable shoulder contact
- Trigger Reach: Finger pad (not joint) on trigger

Air Pistol Fitting

- Grip Size: Hand should wrap comfortably without strain
- Grip Angle: Wrist straight when arm extended
- Trigger Reach: Finger pad on trigger without stretching
- Sight Alignment: Sights align naturally when arm extended

Archery Fitting

- Draw Length: Measure wingspan, divide by 2.5
 - Draw Weight: Start light (15-20 lbs), increase gradually
 - Arrow Length: Draw length plus 1-2 inches
 - Bow Height: Bow should be comfortable to hold at full draw
-

Scholarship and Loaner Programs

Red Dirt Shooting Sports Equipment Support

- 70% of participants receive scholarships covering equipment
- All equipment provided for beginner and intermediate levels

- No purchase required to participate
- Loaner equipment available for all disciplines
- Travel and competition costs covered by scholarships

How to Apply: - Visit: reddirtshooting.com/sponsors-and-partners - Email: info@reddirtshooting.com - Phone: (580) 305-1228

CMP Equipment Grants

- CMP Club Grant Program: Provides equipment to affiliated clubs
 - Junior Distinguished Badge: Earn badges through competition
 - Scholarship Opportunities: National CMP scholarships available
-

Equipment Checklist by Discipline

Air Rifle Checklist

- Air rifle (appropriate for skill level)
- Pellets (.177 caliber wadcutter)
- Safety glasses (ANSI Z87.1)
- Hearing protection (NRR 22+)
- Shooting mat (for prone position)
- Shooting jacket (intermediate/advanced)
- Shooting sling (intermediate/advanced)
- Targets (10-meter air rifle)
- Cleaning kit (rod, patches, oil)
- Rifle case (hard or soft)

Air Pistol Checklist

- Air pistol (appropriate for skill level)
- Pellets (.177 caliber wadcutter)
- Safety glasses (ANSI Z87.1)
- Hearing protection (NRR 22+)
- Shooting shoes (flat-soled)
- Shooting glasses (with blinders, advanced)
- Targets (10-meter air pistol)
- Pistol case (hard or soft)

Archery Checklist

- Recurve bow (appropriate draw weight)
 - Arrows (6-12, matched spine)
 - Arm guard (mandatory)
 - Finger tab or glove
 - Quiver (hip or ground)
 - Bow sight (intermediate/advanced)
 - Stabilizer (intermediate/advanced)
 - Targets (40cm or 60cm faces)
 - Bow case (soft or hard)
 - Allen wrench set (for adjustments)
-

Resources and Support

Equipment Vendors

- CMP Sales: thecmp.org/sales-and-service
- Champion's Choice: champchoice.com
- Pilkington Competition: pilkguns.com
- Lancaster Archery: lancasterarchery.com

Expert Fitting and Advice

- Red Dirt Shooting Sports: reddirtshooting.com/get-in-touch
 - Local CMP Clubs: thecmp.org/youth/clubs-and-teams
 - 4-H Shooting Sports: 4-h.org/parents/shooting-sports
-

Questions? Contact Red Dirt Shooting Sports: - Phone: (580) 305-1228 - Email: info@reddirtshooting.com - Website: reddirtshooting.com

This guide is for educational purposes. Always consult with certified instructors for equipment selection and fitting.