Yearly shooting periodization for dummies by Petr Zidek at BiathlonSchool.com

Yearly shooting periodization for dummies – part 1:

Starting your training season with a yearly training plan is a normal practice for all high-performance athletes. But do you have also your shooting plan ready? If you think that you will just go down to the range whenever you feel like and fire few shots on some targets there, you may find out that it is not really doing much for you later in the season.

As a rule of thumb, the shooting program should follow similar patterns as the physical training program: More general stuff and higher volume in spring / early summer and more biathlon-specific training and shooting with lower volume closer to your important competitions. You can over train your body, but you can also “over train” your shooting skills if you don’t pay enough attention to details.

Shooting is mostly technical skill, everybody should be able to master it after certain period of time and amount of ammunition fired. It is not a surprise, some people have better natural ability than others, but generally you can work it out if you are interested. In biathlon, we are not trying to become a perfect shots; it is more important to develop into certain level and than maintain it under physical and psychological stress occurring during competition. This is main deciding factor and the difference between good and average biathlete. However, to fully develop your shooting skills and see your real potential, you need to spend at least five years working hard (and shooting around 50,000 rounds of ammo on the way).

Coming soon – Month by month guide to biathlon shooting training!

Yearly shooting periodization for dummies – part 2:

High performance biathlon is a year-round serious business. High performance athletes are taking 2-6 weeks of recovery after previous season and than it starts all over again. Based on local weather and other conditions, shooting training usually starts in May.

Most available publications will give you some idea in raw numbers, but what do you really need to focus on month-by-month? It is individual, based on several factors, but you can try this as a guideline. We have been using a two-peak season model.

May
- Rifle fit, maintenance, dry firing, position set-up and adjustments as necessary.
- It is more important that the rifle fits perfectly in Standing, you can always slightly adjust your prone position.
- Working with both prone (P) and standing (S); for trigger work and breathing patterns start in P.
- At least 50% of all shooting on paper target for better feedback
- Focus: precision shooting, position set-up, all technical skills.
- Volume: 400-500 rounds per week
- Intensity: no intensity or low (z.1)
- Testing: precision shooting (20+20 or 30+30), 60-80 shots on metal target – every week,
- Dry firing: mostly done on the shooting range under supervision, holding drills

June
- Position set-up (consistency and speed), using poles
- Sight alignment, “shots reading” – where and why?
- Around 50% of all shooting on paper, rest on plates.
- Focus: 70% no intensity (50% precision, 50% speed drills), 30% combo, shooting games
- Volume: 400-500 rounds per week
- Intensity: strength circuit or low-medium intensity (z.1-3)
- Testing: precision shooting every second week, 60-80 shots on metal target, 2-min drill every week
- Dry firing: mostly done on the shooting range, trigger work and speed. Holding drills at home.

July
- Position set-up (consistency and speed), using poles and roller skis
- Sight alignment, follow-through, automation
- 60-70% shots on metal target
- Focus: 50-60% combo (all intensities), 40% no intensity shooting. Shooting under physical fatigue.
- Volume: 350-450 rounds per week
- Intensity: all, longer workouts
- Testing: precision shooting every second week (we may see actual slight performance decrease – that’s normal), 2-min drills
- Dry firing: mostly done on the range under supervision, trigger work and speed.

August
- Automation of all acquired skills
- 70-80% shots on metal target
- 70%+ shots on metal target
- Focus: 70% combo, 30% no intensity shooting (mostly shooting drills)
- Volume: 300-400 rounds per week
- Intensity: all, longer workouts and time trials/short races every week
- Testing: biathlon shooting (5-across, speed, 2-min drill), 80-100 rounds on metal
- Dry firing: about 50% done at home, generally following the same drills as shooting training
Note: From now on, there is a need to create more mental pressure for shooting – two athletes together, shooting games, training competitions several times a week!

**September**
- Automation of all acquired skills under pressure (mental and physical)
- 80% of shots on metal target
- Focus: 80% combo, 20% no intensity (drills, tests, games)
- Volume: 300-400 rounds per week, based on competition / testing schedule
- Intensity: all, longer workouts and training competitions
- Testing: precision shooting (30+30) once a month, biathlon shooting, 80-100 rounds on metal
- Dry firing: about 60% done at home, less volume if racing for selection

**October**
- The ability to use all skills under high pressure / fatigue
- 70-75% of shots on metal target
- Focus: 80% combo, 20% no intensity (similar to September, reinforcing technical basics)
- Volume: 300-400 rounds per week
- Intensity: all, training competitions or games whenever there is an intensity workout
- Testing: precision shooting (30+3-) once a month, 2-min drill every week, 80-100 rounds on metal
- Dry firing: 70% done at home, position set-up, speed

**November**
- Transferring all acquired skills onto a snow
- 75-80% of shots on metal target
- Focus: 80% combo, 20% no intensity (mostly just zero now and few tests)
- Volume: 300-400 rounds per week
- Intensity: all, higher is usually better
- Testing: 2-min drill every week, 5-across P and S on paper for % at least 2x per month
- Dry firing: 80% + done at home, possibly in ski boots and on skis

**December**
- Automation of all acquired skills on snow and under mental / physiological stress
- 80% of shots on metal target
- Focus: 80% combo
- Volume: based on racing, 200 - 350 rounds per week
- Intensity: all, time trials and races
- Testing: 60-80 rounds on metal target with time pressure, 2-min drills
- Dry firing: 80% done at home, about 10 min possibly before every shooting session and race and another 20-30 min in the afternoon / evening. Less volume before races.
January, February, March
-  the training schedule is mostly dictated by the competition calendar
-  volume prior big competitions should be moderate to low
-  some athletes need to maintain lots of dry firing, while others prefer to take a “mental break”

April
-  time for rest, but also making sure that your gear is maintained and ready to go when you will need it again.

Note 1: It is important to always strive for a good percentage (80%+), even if pushing for more speed and under fatigue. If you are not able to score so high, try to go a step back and make sure that there is nothing from the basics missing.

Note 2: It is important to increase the mental pressure periodically, using group format (at least two individuals together), games and training competitions.