

BOW HIGH SCHOOL: 2021-2022 NORDIC SEASON TRAINING CONTRACT

Athlete Name:	Season Goal:	Starting Group (Gold/Blue/Falcon):		
List Pre-Existing Practice Conflicts During January & February [LIGHT GRAY w/Black Text Cells, beginning with "P:"] (not to exceed 5 practices):				
List Pre-Existing Regular Season Race Conflicts[DARK GRAY w/White Text Cells] (not to exceed 3 races):				
Initials/Date of submission (student-athlete) and approval (Parent/Guardian & Coach) of conflicts listed above:		Student-Athlete:	Parent/Guardian:	Coach:
		Initials/Date:		

KEY: LIGHT GRAY w/Black Text-Practice Days (P=all@BHS, F=Falcon, OPT=Optional); DARK GRAY w/Bold White Text-NHIAA Regular Season Races; WHITE w/Black Text-REST DAY, HOLIDAY, Individual Workout; DARK GRAY w/Bold Black Text-NHIAA Championship Races; #-Other races of potential interest

Week 1:	12/5	12/6	12/7	12/8	12/9	12/10	12/11
BASE		P: 3:20-4:50PM	P: 3:20-4:50PM	P: 3:20-4:50PM	P: 3:20-4:50PM	OPT: 3:20-4:50PM	#ZAK@VT[S-Sprint]
Week 2:	12/12	12/13	12/14	12/15	12/16	12/17	12/18
BASE	#ZAK[C]	P: 3:20-4:50PM	P: 3:20-4:50PM	P: 3:20-4:50PM	P: 3:20-4:50PM	OPT: 3:20-4:50PM	#EC1[S-Sprint]
Week 3:	12/19	12/20	12/21	12/22	12/23	12/24	12/25
BASE/STEP[S]	#EC1[C]	P: 3:20-4:50PM	P: 3:20-4:50PM	P: 3:20-4:50PM	P: TBD[Early Rel. Day]		
Week 4:	12/26	12/27	12/28	12/29	12/30	12/31	1/1
BASE/STEP[S]		OPT:TBD	OPT:TBD	OPT:TBD	OPT:TBD		
Week 5:	1/2	1/3	1/4	1/5 @15:00[S]	1/6	1/7	1/8
STEP[S]	#ZAK@NH[C]	P: 3:20-4:50PM	P: 3:20-4:50PM	Hopkinton	P: 3:20-4:50PM	OPT: 3:20-4:50PM	#ZAK@VT[C]
Week 6:	1/9	1/10	1/11	1/12 @15:00[S]	1/13	1/14	1/15
STEP[S]		P: 3:20-4:50PM	P: 3:20-4:50PM	Proctor Academy	P: TBD[Midterms]	OPT: TBD[Midterms]	#ZAK@VT[S]
Week 7:	1/16	1/17	1/18	1/19	1/20	1/21	1/22 AM&PM[S]
STEP[S,C]	#ZAK@VT[S-Sprint]		P: TBD[Midterms]	P: TBD[Midterms]	P: TBD[Recovery Day]	P: 3:20-4:50PM	WMRHS (NHNCA)
Week 8:	1/23	1/24	1/25	1/26 @15:00[C]	1/27	1/28	1/29
STEP [C]	#ZAK@VT[S]	P: 3:20-4:50PM	P: 3:20-4:50PM	Proctor Academy	P: 3:20-4:50PM	OPT: 3:20-4:50PM	#EC2[C-Sprint]
Week 9:	1/30	1/31	2/1	2/2 @14:00[C]	2/3	2/4	2/5 #ZAK@VT[C]
STEP [C]	#EC2[S]	P: 3:20-4:50PM	P: 3:20-4:50PM	Plainfield	P: 3:20-4:50PM	OPT: 3:20-4:50PM	#EC3[C]
Week 10:	2/6	2/7	2/8 @15:00[C]	2/9	2/10	2/11	2/12 AM&PM[C]
STEP [C]	#EC3[S]	P: 3:20-4:50PM	Hopkinton	P: 3:20-4:50PM	P: 3:20-4:50PM	P: 3:20-4:50PM	Plymouth (NHNCA)
Week 11:	2/13	2/14	2/15	2/16 @15:00[S]	2/17	2/18	2/19 #ZAK@VT[S]
Tuning	#ZAK@NH[S]	P: 3:20-4:50PM	P: 3:20-4:50PM	Proctor Academy	P: 3:20-4:50PM	OPT: 3:20-4:50PM	#EC4[F-Sprint]
Week 12:	2/20	2/21	2/22	2/23 @15:00[C]	2/24 @15:30[S]	2/25	2/26
Tuning	#EC4[C]	P: 3:20-4:50PM	P: 3:20-4:50PM	Proctor Academy	Beaver Meadow		
Week 13:	2/27	2/28	3/1	3/2	3/3	3/4	3/5
Tuning		F:TBD	F:TBD	F:TBD	F:TBD		
Week 14:	3/6	3/7	3/8 AM[C]/PM[S]	3/9	3/10	3/11	3/12
Tuning		F: TBD	States(Great Glen)	F:TBD	F:TBD	U16[TeamNH Only]	U16[TeamNH Only]
Week 15:	3/13 #ZAK@NH[S]	3/14	3/15 @16:00[C/S]	3/16	3/17	3/18	3/19
Tuning	U16[TeamNH Only]	F: TBD	MOC (Proctor)			EHSC[TeamNH Only]	EHSC[TeamNH Only]

Physiological Terms and Training Zones

Aerobic Fitness – A good aerobic base requires a strong central system (heart and lungs) and effective oxygen use in the working muscles. Good aerobic fitness allows an athlete to reach high levels of sustained output, with a correspondingly low level of lactate (lactic acid) concentration in the muscles.

V02 Max – The maximum volume of oxygen an athlete can uptake at peak aerobic output (liters per minute).

Anaerobic Efforts – When power output demands can no longer be satisfied via the aerobic metabolism of fuel sources (glucose and glycogen), the muscles adapt to a less-efficient method of energy that does not require oxygen. This enables the athlete to produce more power ... but not without cost ... lactic acid is produced in the muscles as a by-product. The maximum duration of an anaerobic effort is in the neighborhood of 45-60 sec.

Anaerobic Threshold/Lactate Threshold – Lactic acid can be cleared from the active muscles via the blood-stream. When the production of lactic acid exceeds the capability of the bloodstream to remove it, a build-up occurs in the active muscles. The power output level at which this build-up begins is called the lactate threshold.

Lactate Tolerance – Lactate tolerance is the maximum amount of lactic acid that an athlete can endure within their muscles while maintaining peak power output.

Optimal performance requires Core Strength, Endurance, and Technique: This page specifically addresses Endurance.

Maximum training benefit occurs when the workout also incorporates aspects of Core Strength and Technique.

Training Zones	Heart Rate	How does it feel?	Why do it?
Zone 1: Recovery Training (Recreational)	HR: 60-70% of max	Easy to talk or sing	Recovery Training is an important part of any plan. It allows active recovery of systems stressed by more intense training, without allowing loss of fitness.
Zone 2: Aerobic Base (Conversational)	HR: 70-80% of max	Still OK to talk, but not if you go much faster	Aerobic Base Training provides the bulk of forward progress in training peripheral system (everything that happens in your muscles).
Zone 3: Anaerobic Threshold (Non-Conversational)	HR: 85-90% of max	Comfortably hard but hardly comfortable	Anaerobic Threshold Training provides the greatest return in terms of aerobic power (heart and lungs).
Zone 4: Race Pace (Sustained Speed)	HR: 90-95% of max	Maximum sustained pace over given distance. Start out feeling good and finish feeling very hard	Race Pace training helps develop the necessary lactate tolerance for sustained hard efforts.
Zone 5: Maximum Effort (All out)	HR: Max	As hard as you can endure	Mostly occurs naturally at the right time, as an athlete completes as an athlete kicks for home in an interval or a race.