

US Junior Women 2009/10

Winter Training Suggestions

Performance Expectations: Only those candidates who row 2,000 meter in 7:20 or faster will be invited to selection camp. Rowing 1:50 splits for 2,000meters requires a unique combination of Anaerobic and Aerobic Power. The winter training program will target the development of these two capacities independently prior to combining the two in an effort to break 7:20.

Performance Targets:

- Anaerobic Power: 1' @ <1:36.5 or 500m @ <1:39.0
- VO2max: 6' @ 1:49.0 or 2,000m @ 1:50.0
- Aerobic Power: 4 x 10' with 2' rest @ 2:00 or 40' @ < 2:02.0
- Training Volume Recommendations:
 - Base Phase – December = 8 hrs/week; January 9 hrs/week; February = 10 hrs/week
 - Specific Preparation Phase - March, April, May; training volumes will be largely dictated by your schools/clubs training program; additional training can be discussed individually and cleared through your coach.
 - Competition Preparation Phase – June/July – Once you are with us, it is likely that you will be training as much as 18 hours/week. Our goal is to prepare you mentally and physically to do this. Not having school is a big help ;)

Sample 8 hour training week

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
AM	off	45' strength training	off	off	45' strength training	Aerobic Power erg	off
PM	Anaerobic Power erg	60' St. St. X-train or erg	45' steady state erg + 45' steady state run	Anaerobic Power erg	60' St. St. X-train or erg	off	off

Anaerobic Power Training Progression: Can be undertaken 2x per week, with adequate separation for the best training effect.(e.g. Wed/Sat or Mon/Thurs). Do the 7 week cycle 2 times through.

Week	Training
#1	15' warm up (5' easy, 4' pretty easy, 3' moderate, 2' pretty hard, 1' hard – rates 22 – 30); 8 x 100m AFAP (as fast as possible) with 2:00 rest between; 20'-30' easy steady state (rowing or running) to follow.
#2	15' warm up as above; 6 x 133m AFAP with 2:30 rest between; 20'-30' steady state to follow.
#3	15' warm up; 4 x 200m AFAP with 3:00 rest between; 20'-30' steady state to follow.
#4	15' warm up; 3 x 266m AFAP with 3:30 rest between; 20'-30' steady state to follow.
#5	15' warm up; 2 x 400m AFAP with 5' rest between; 20'-30' steady state to follow.
#6	15' warm up; 1 x 1' or 500m (your choice) attempting to achieve the standard. 40' steady state to follow.
#7	Rest/Recovery week. 15' warm up; 5 x 10 seconds AFAP with 1:50 rest between.

Aerobic Power Progression: Done once per week on “fresh legs” – e.g not after a “hard training” day.

Week	Training
#1	10' warm up of your choice: 4 x 10'on/2'off AFAP; rates 22, 24, 26, 26/28 (5'/5'). Your Average split for all 4 pieces is your T.P. “training pace”
#2	10' warm up; 8 x 5'@T.P./1' rest between, rate 24 – 26. If you feel good through the first 5, you can take the split down over the last 3, but not more than 2 seconds
#3	10' warm up ; 5 x 8'@ T.P./1:36 rest between, rate 26. If feeling good you can take it down on the last 1.
#4	10' warm up ; 4 x 10' @ T.P./2' rest, rate 26. If you feel good, take it down on the last one.
#5	10' warm up; 3 x 13:20 @ T.P./2:36 rest between. If you feel good, take it down on the last one.

#6	10' warm up; 2 x 20' @ T.P./4' rest between. If you feel good, take it down in the last 10' of piece #2.
#7	10' warm up; 1 x 40' AFAP, rate 26.
#8	Rest week – no Aerobic Power. Your 40' split is your new T.P.. Start the cycle again beginning at week #2.

VO2max Progression: Will be introduced in late February or early March.

Steady State Training – Should be done with a “Broad Intensity”, ranging from 4 to 16 splits slower than your 4 x 10' average split.

Sample 48' Escalator Workout: 10' warm up:

Double Mini Escalators (T.P. is your 40' pace)

Escalator - 12' @ T.P.+8; 8' @ T.P.+4; 4' @ T.P.; 4' rest between

Rates 22-26

Sample 60' Escalator State Workout: 10' warm up:

Escalator – 16' @ T.P.+16; 12' @ T.P.+12; 10' @ T.P.+ 8; 8' @

T.P.+ 6; 6' @ T.P.+4; 4' @ T.P.+ 2.

Rates 20 – 26

Sample 45' Steady State: 10' warm up'

20' @ T.P. + 8, rate 22/ 2' rest

15' @ T.P. + 6, rate 23/2' rest

10' @ T.P. + 4, rate 24/2' rest

Sample 60' Steady State: 10' warm up'

30' of 12'; 10', 8' @ T.P. +12, +10, +8/3' rest

20' of 9', 7', 4' @ T.P. +10, +8, +6/2' rest

10' of 6', 3', 1' @ T.P. +8, +4, T.P.

For those who are interested or encouraged to add running to their training programs, here is a simple and accurate way to gauge your training:

Testing VO₂max while Running: Here coaches and athletes will need a 400 meter track, a stop watch, paper and pencil and the ability to do math.

Running vVO₂max Protocol: Once again it is important that athletes be adapted to the stresses of running prior to engage in this level of training. Athletes should do a minimum of 3-4 weeks of easy running (3-4 times per week) before attempting to run at these levels.

- Warm-up 15-20 minutes, as you would for a running race
- Run 2 miles AFAP (as fast as possible) – It is best to do this individually. If an athlete over-paces for the first few minutes, the overall distance will be much less than with correct pacing. It is often a good idea to do a “pre-test” run to allow the athletes to become familiar with the distance. There should be a minimum of 48 between a pre-run and the actual test.
- Let us imagine an athlete runs exactly 2 miles in 15:00. The goal then becomes to run 2 miles in 13:30 in 12 weeks. This represents a 10% improvement in vVO₂max.

Training the VO₂max while Running: To advance the VO₂max as much as possible, it is recommended that athlete perform a minimum of four training sessions each week (or every other day). Prior to each sessions, athletes should warm-up for 15-20' or as they would for a race. A 10-15 minute cool-down is recommended after each session. The goal of these sessions is to run the recommended times with greater ease. It is tempting to go faster if you can, but athletes need to understand that fitness is improving if they can accomplish these paces more easily:

Half the Distance: Athletes should half the distance of their test (eg. 1 mile) and run 4 x this distance in 7:30 minutes (vVO₂max) with 1' recoveries between.

Double the Distance: Double the distance of the trial (eg. 4 miles). Run this distance once a week in 30' + 3' (10% slower than race pace)

Repeat 200s:

- Calculate time per 400m lap (e.g. 2 miles in 15:00; 1mile in 450 seconds; 400m in 112.5seconds (1:52.5))

- Half this time and subtract 8 seconds; $56.25 - 8'' = 48''$
- Run repeat 200m at this pace starting with 90 seconds recovery, decreasing the recoveries until you reach 15'' (eg. 37/15/37)
- Repeat this 2 times.

Long Run: Multiply the distance by 4 (eg. 4 x 2m = 8 miles).

Run this distance in $60' + 9' = 69'$