# CANOE SPRINT AND PARACANOE PHYSICAL PREPARATION 

FUNDAMENTAL BUILDING BLOCKS FOR ATHLETIC DEVELOPMENT

## Stage 1: <14

Stages 1-3 of physical development are progressive in nature with regards to the physical demand, complexity and future potential to progress. Athletes should be exposed to a wide variety of movements whereby they can explore and problem solve in the context of multi-sport games. FUN should be at the heart of stage 1.

The guide below should provide clear direction and options for stage 1 programming based on agility, balance and coordination principles through simple animal movements. These underpin more advanced muscle movements and are a precursor for stage 2 . It is important to note that even when you pass through this stage, these types of movements are great to include within warm ups. They are fun, allow for exploration and can be easily modified.

You can select a column per session which will cover all primary movement skills. Reps and sets can be easily manipulated by the coach through either reps or time.

Click on the links in red for demonstrations of all the exercises for programmes 1-4.

|  | Programme 1 | Programme 2 | Programme 3 | Programme 4 |
| :---: | :---: | :---: | :---: | :---: |
| Double Leg | Duck Pose | Bunny Hops | Horse Walks | Lateral Ape |
| $\underline{\text { Single Leg }}$ | Spiderman | Duck Walks | Crouching Tiger | Sneaking Ape |
| $\underline{\text { Hinge }}$ | Crab Walks | Bear Crab Roll | Donkey Kicks | Horse Leaps |
| $\underline{\text { Upper Body }}$ | Inchworm | Bear Crawl | Chameleon | Lazy Dog |
| Base <br> Training | Swimming | Cycling | Running | Rowing |

## Stage 2: 14-16

Athletes should be introduced to a more structured physical development programme and exposed to movements which provide longer-term foundations for future physical development. Stage 1 content should still be utilised within stage 2 as part of preparation for the movements below, for example within warm ups.

The guide below should provide clear direction and a range of options for programming linked to key lifting movement patterns.
Click on the links in red for demonstrations of all the exercises for programmes 1-5.

| Primary Movement Pattern | Programme 1 | Rep/Set | Programme 2 | Rep/Set | Programme 3 | Rep/Set | Programme 4 | Rep/Set | Programme 5 | Rep/Set |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Squat | Isometric squat | 45 secs | Box squat | 12-20 reps | Goblet squat | 8-15 reps | Barbell front squat | 8-12 reps | Barbell back squat | 8-12 reps |
| Lunge | Isometric lunge | $\begin{gathered} 45 \\ \text { secs/side } \end{gathered}$ | Goblet reverse lunge | $\begin{gathered} \text { 8-12 } \\ \text { reps/side } \end{gathered}$ | Barbell split lunge | $\begin{gathered} \text { 8-12 } \\ \text { reps/side } \end{gathered}$ | Rear foot elevated goblet split lunge | $\begin{gathered} \text { 8-12 } \\ \text { reps/side } \end{gathered}$ | N/A | N/A |
| Press | Press up | 8-12 reps | Incline press up | 8-12 reps | Weighted press up | 8-12 reps | Dumbbell bench press | 10-12 reps | Barbell bench press | 8-12 reps |
| Horizontal Pull | Inverted row (bent legs) | 8-12 reps | Inverted row (straight legs) | 8-12 reps | ```Inverted row (legs elevated)``` | 8-12 reps | Inverted row (1 leg raised) | 8-12 reps | Inverted row (legs bent + load) | 8-12 reps |
| Vertical Pull | Vertical hanging | Build to 30 secs | Eccentric chin-down (wide grip) | 3-6 reps | Banded pull-up (wide grip) | 8-12 reps | Body weight pull-up (neutral grip) | 6-12 reps | Wide grip pull-up with load | 8-12 reps |
| Hinge | Kneeling hip hinge | 10-20 reps | Double leg hip bridge | 8-12 reps | Single leg hip bridge (back to box) | $\begin{gathered} \text { 8-15 } \\ \text { reps/side } \end{gathered}$ | Loaded hip bridge (single leg) | $\begin{gathered} 8-12 \\ \text { reps/side } \end{gathered}$ | Barbell RDL | 8-12 reps |
| Trunk | Front plank | 30-45 secs | Front plank alternate leg raise | $30-45$ secs | Side plank | $30-45$ secs | Dead-bugs | $\begin{gathered} \text { 6-12 } \\ \text { reps/side } \end{gathered}$ | Double leg lower | 8-12 reps |
| Shoulder | External \& internal rotations | 10-15 reps/ side | Swimmers | 12-20 reps | Y-T-W | 6-10 reps | Frontal * lateral dumbbell raises | 15-20 reps | Dumbbell seated overhead press | 8-12 reps |

Based on the same exercise programmes as stage 2, in stage 3 athletes should start to become more deliberate about trying to achieve, progress and/or accumulate training volume and intensity more consistently over time.

This is the key difference between stage 2 and 3 .

Athletes and coaches may choose to be more deliberate and targeted by using the above programmes as a framework and selecting which exercises warrant increased time investment. E.g. use of grip variation based on Canoe/Kayak. If selecting programmes 4 or 5 primarily, elements of programmes 1 to 3 could be incorporated as supporting exercises to accommodate potential heavier lifting.

## Improving form

You can find a video resource here with some common faults and corrections within key exercises for stages 2 \& 3.

## 1RM Calculator

Use our 1RM calculator to calculate your One-Rep maximum.

This will tell you what your predicted 1RM is for all of your loaded exercises, e.g. dumbbell bench press in programme 4 of stage 2 and stage 3.

You can find our 1RM calculator here.

