

# AQUA ARTHRITIS - A MAGICAL PARTNERSHIP: FOCUS ON MOVEMENT

by Peggy Stirling

Arthritis, or rheumatic disease, is a chronic condition that will affect 1 out of every 7 individuals.

### *Dealing with clients with Arthritis:*

At some point in your career as an aquatic fitness professional you will probably come in contact with a participant experiencing pain and stiffness. As your clientele ages, you will likely hear more and more complaints of painful, aching joints. Arthritis, or rheumatic disease, is a chronic condition that will affect 1 out of every 7 individuals.

### *History of the Aqua Arthritis Course:*

Since 1998, CALA has been offering a comprehensive Aqua Arthritis Training and Certification course to enable instructors to offer safe programs geared towards this spe-

cial population. The course materials include an Arthritis Catalogue featuring a wide variety of moves and a current manual. The moves form a foundation upon which instructors can design and develop safe aquatic exercise programs suited to individuals experiencing arthritis of some form.

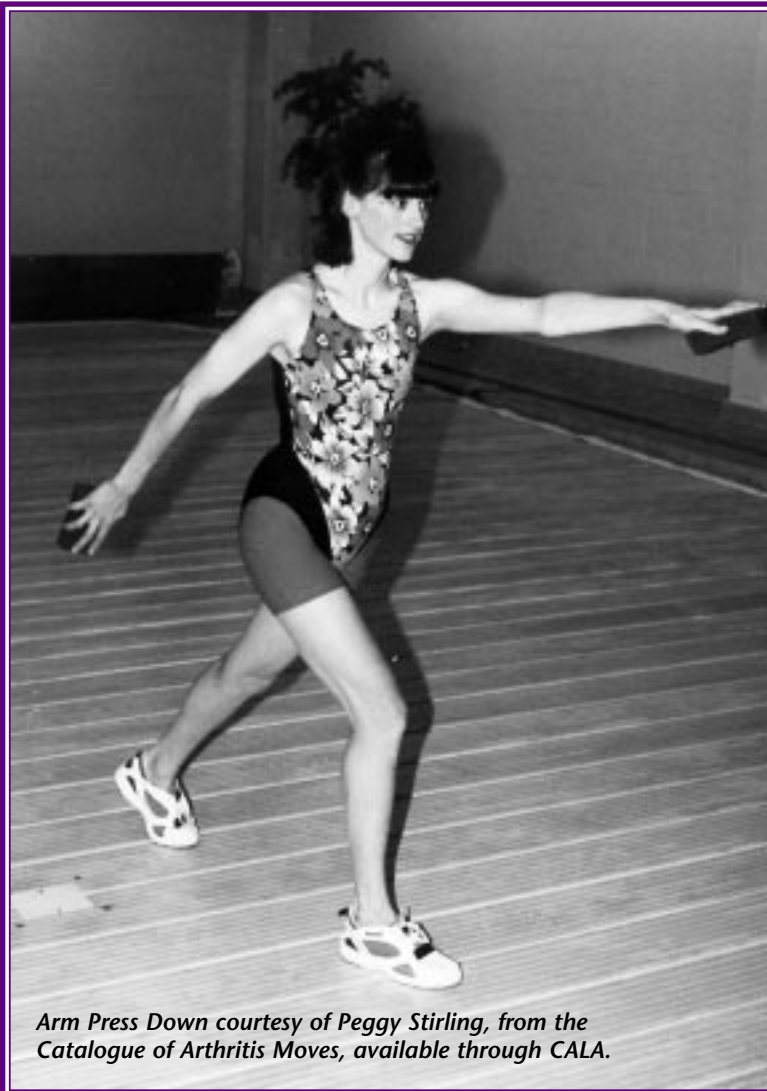
### *International Recognition:*

This Aqua Arthritis Training and Certification course is widely accepted across Canada, the United States, in South Africa and in Great Britain. It is impressive that the creators of this program are two CALA trainers: Sheralee Beebe and Peggy Stirling. Both individuals have had considerable aquatic experience in working with participants who have arthritis and in areas of general rehabilitation. The original manual has grown in depth with the

help of physiotherapists and exercise physiologists associated with ATRI (Aquatic Therapy and Rehabilitation Institute) and other CALA trainers including Connie Jasinskas and Carol Weerdenburg. Peggy and Sheralee continue to embrace feedback as the manual and course are molded to suit the growing needs of health care givers, including fitness professionals.

### *University Accreditation:*

University of Stellenbosch, South Africa, a prestigious and leading academic organization has offered the CALA Aqua Arthritis course in conjunction with other pertinent areas of water rehabilitation including such topics as Cardiac Rehabilitation; Joint Replacement; The Healing Power of Exercise; Common Sports Injuries; and Back Splash (to name a few). The Human Movement Sciences Department working together with the Medical Faculty have offered this program to third and fourth year students for two consecutive years. The university is finalizing plans to accredit the



*Arm Press Down courtesy of Peggy Stirling, from the Catalogue of Arthritis Moves, available through CALA.*

course within the curriculum. Congratulations are in order for all who have made this project work.

### **Benefits of Aqua Arthritis Moves:**

It is important to understand the suitability of certain movements for specific conditions. Each movement can be modified by integrating levels of progression. This enables the leader to use most of the moves in a manner that will suit the needs of every individual. In some cases, certain moves in the catalogue are not appropriate. Through the course, leaders are taught how to work together with other health care professionals and the client in determining the suitability of each move.

### **Featured Aqua Arthritis Movement: The Arm Press-down**

This move is an excellent trunk stabilization exercise.

**Description:** *This movement may be performed in chest deep or deep water.*

- Reach arms to front at chest level, in chest deep water, squat with one leg in front of the other, knees bent, body upright and lift arms to height of shoulders.
- Ensure shoulders are submerged.
- Hold one sponge in each hand with palms facing down.
- Move one arm down and allow it to extend past the hip towards the back as far as is comfortable.
- As the arm moves forward to the front, return to the start position, move the other arm, in a swinging motion, to the back.
- Keep pelvis in "neutral" or level, throughout the arm action.
- Keep rib cage lifted, back long, feel tall.
- Keep abdominals activated.
- Avoid any rotational action at hips.
- Maintain a symmetrical arm pattern.

**Benefits:** *This move has many interesting benefits.*

1. Improves range of motion (ROM) at the shoulder joint.  
*Modification:* Bend elbows, keeping them bent at a 90° angle throughout the move. This will decrease the intensity of the movement making it easier.
2. Improves strength and condition of the muscles associated with the shoulder, upper back, neck and chest.

*Modification:* To increase or decrease the intensity of this move, alter one or more of the following:

- lever length;
  - ROM;
  - hand position (slice, fold, cup, flat);
  - add equipment such as a sponge or wand;
  - alter speed of motion (SOM).
3. Improves strength and condition of core stabilizers including the abdominal and erector spinae muscles.  
*Technique Tip:* Ensure the client keeps hips and shoulders steady and facing forward. If the torso remains still while the arms are moving, the body is challenged to stay securely on the spot without turning and twisting in response to the properties of turbulence and buoyancy. The trunk muscles are activated to stabilize the body. In deep water the arm movement alone will challenge the stabilizers if the trunk is effectively resisting the body's tendency to twist. (Newton's Law of action and reaction).
  4. Add low intensity locomotor movements such as cross country ski or ski stop, performed with a light bounce or anchored (no bounce) with the Arm Press-down move (alternate cross country ski arms) to improve cardiovascular endurance.
  5. Add equipment such as wands whereby participants work in partners by holding on to the end of one another's wand. This will increase social interaction and two way communication.

*Point of interest:* People with Ankylosing Spondylitis, benefit from partner work with wands while performing the Arm Press-down move. The increase in ROM may help to prevent or retard the tendency of the spine to fuse in a forward bent or kyphotic position. In cases where clients have Ankylosing Spondylitis (AS) it is essential to emphasize a tall back position with activated abdominal muscles, while allowing the spine to gently rotate on its axis. This can be done by pulling the bent elbows back as far as the individual is capable, within the zone of comfort. When doing partner work, ensure the clients are matched for size, strength and ROM.

\* Note: The "Arm Press-down" move is D:3 in the Catalogue of Moves Manual written by Peggy Stirling.