



WELSH BOWLS UMPIRES ASSOCIATION

Training Manual & Handbook



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English Bowls Umpires Association
World Bowls Ltd

The WBUA would like to thank all past and current members of the Association for the hard work that they have put into making the Association what it is today.

The original manual was compiled by Brian Pocock and Peter Ralph on behalf of the WBUA.

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1. INTRODUCTION

Introduction

Welcome to the Welsh Bowls Umpires Association Training Manual & Handbook.

The manual has been produced to complement all training courses run by the Association, from the initial recruitment right through an umpire's career and should be seen not only as a teaching aid but also a valuable point of reference for umpire related matters.

This edition of the manual has been revised in line with the "Laws of the Sport of Bowls - Crystal Mark Fourth Edition"

Recent years have seen the training of WBUA Umpires evolve to meet current trends and best practices. This has resulted in changes to the training of new candidates, combining established methodology with a more practical aspect of umpiring.

Within the manual you will find general advice on umpiring, marking and further details on training.

As with any living document, this manual will be subject to change and amendment as determined by the Association.

TRAINING & DEVELOPMENT.

The training and development of Bowls Umpires in Wales is outlined below:

1. Grades of Umpires:

- a. **Level 1 Umpire Qualification** – enables qualified umpires to officiate at any internal or national competitions within Wales. This course comprises 3 training modules and will take place annually depending on the number of candidates.
- b. **Level 2 Umpire Qualification** – eligible to be selected to officiate at Home International and British Isles events. This course comprises 3 training modules and will take place as required by the WBUA Management Committee.
- c. **International Technical Official** - qualified to umpire at Commonwealth Games, Atlantic Games and World Bowls. Assessment carried out by World Bowls.

2. Continuation Training

The WBUA run annual seminars for each area of the country. All active umpires must attend and participate in at least 1 of these seminars every 2 years.

3. Markers - Seminars & Course.

Marking Seminars.

The WBUA will run Marking Seminars as requested by Bowling Clubs throughout Wales. The aim of these seminars is to raise the standard of marking at club level and make new players more aware of the laws and protocol of the sport.

Markers Course.

The WBUA will, as required, run formal Markers Courses for experienced players with the object of establishing a data base of qualified Markers to officiate at County, National & International events in Wales. Level 1 or Level 2 qualified Umpires may be invited to attend this course which is designed to ensure that standard best practices and techniques are used during the course of marking a Singles game.

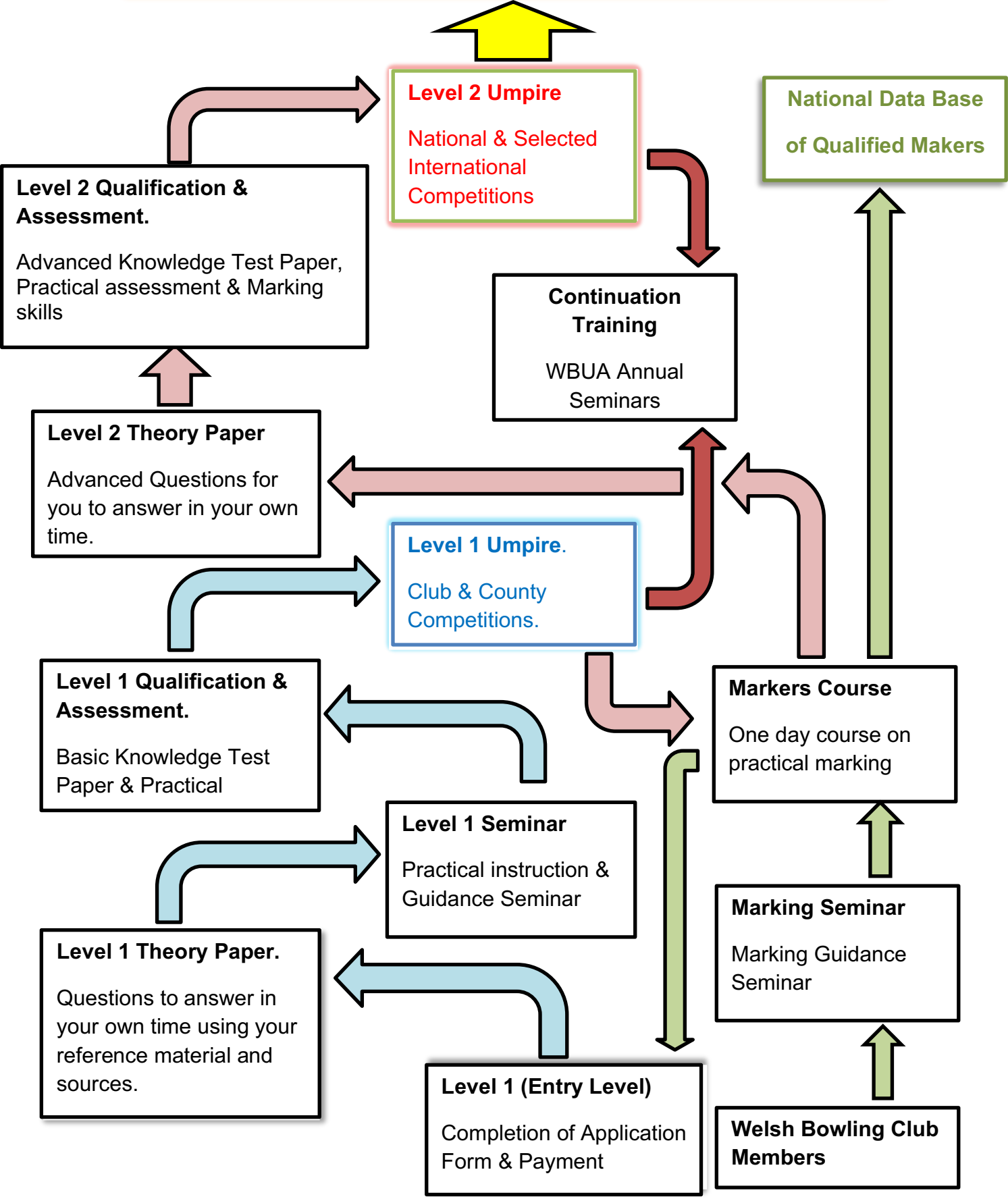
4. International Badge.

Level 2 Umpires selected to officiate at Home Internationals or British Isles events may apply for their International Badge once they have completed an extended period of duty at one of the above events

5. General Notes.

1. The edition of the World Bowls Crystal Mark Edition of the Laws of the Sport of Bowls in use at the time of the course will be used for all WBUA courses.
2. Completed Level 1 and Level 2 Theory papers should be returned to the WBUA Secretary at least 6 weeks prior to the dates of the practical course or assessment, to enable time for papers to be marked and successful candidates notified of the next stage of the course.
3. Level 1 courses are normally run during the Autumn. Level 2 Courses and Markers Courses are normally in the Spring. However, the WBUA may change the time of these courses as required by circumstances and may also run additional courses if the WBUA Management Committee so authorizes.

International Technical Official (ITO)
 Examination and Practical Assessment carried out by World Bowls Ltd.
 Qualified to umpire at Commonwealth Games, Atlantic Games, World Bowls



Training & Continuation Training Programmes

1. Level 1 Course

This course is designed as a base level course and as the first step into umpiring the sport of bowls. Applicants should have at least 2 years' experience of playing bowls prior to applying. The course consists of 3 parts.

Module 1. The Theory Paper.

The Level 1 question paper will consist of 75 questions based on the current outdoor law book. This question paper may be completed using whatever reference material is available in order to reach an informed answer. It will encourage the candidate to read the Laws of the Sport of Bowls but also offer challenges that may require the candidate to seek advice from elsewhere. There is no time limit on completing the paper, but it must be returned to the WBUA Secretary 6 weeks before, to allow marking and assessment to take place. The WBUA Panel should have several theory papers available to send to candidates in order to ensure a fair test and assessment. A pass rate of 90% should be achieved to enable the candidate to go on to Module 2.

Module 2. Practical Seminar.

Successful candidates from Module 1 will be invited to a Practical Seminar at a convenient location, which will endeavour to teach the candidates the correct measuring skills and techniques to be used when umpiring a game of bowls. The Tutors will all be members of the WBUA Panel or experienced umpires of long standing.

This seminar will be over one day at a date and venue nominated by the WBUA. The seminar will be mostly green based. Tutors will demonstrate each of the measuring situations with techniques laid down by World Bowls Ltd. The seminar is designed to be relaxed but informative.

Umpiring correctly is a challenge but is enjoyable and rewarding if done properly.

Module 3. Practical Examination.

Module 3 will normally take place two or three weeks after the completion of Module 2 to give candidates time to practice and perfect their skills and techniques.

The examination will consist of two parts.

a. A short examination paper of 15 questions to be answered in an allocated time of 45 minutes. These questions should be answered without the aid of a Law Book and are designed to assess the candidate's basic knowledge of the game of bowls. The questions are not difficult, and any qualified umpires should be able to answer them correctly without reference to the Law Book.

b. Practical Examination. Candidates will be expected to carry out a series of measuring tests designed to test their competence, confidence and ability to select the right tools for the task in hand. Candidates will be asked to identify the "shot" bowl or to make a decision regarding the jack or bowl/s depending on the set scenario. Candidates will be assessed on their techniques and decisions by the tutors, A minimum of 12 situations will be laid out for assessment. Candidates should not discuss the situations with each other until the whole assessment is complete.

Examination Assessment.

The WBUA Panel will assess the performance of those candidates who completed Modules 1, 2 and 3. Those candidates who, in the opinion of the WBUA Panel, have shown a level of skill, knowledge and confidence to enable them to become an active member of the WBUA will be informed by letter/e-mail as soon as practically possible after Module 3 is completed. Those unsuccessful candidates will also be informed and may be invited to retake some part of the examination in due course.

Initial Umpiring by newly qualified Umpires.

It is strongly recommended that newly qualified umpires when attending their first event/s, should be accompanied by an experienced umpire to guide them through their baptism of fire.

2. Level 2 Course

The Level 2 upgrade course is designed for experienced umpires who wish to progress to a higher level. Candidates should have a minimum of 3 years' experience in the field, including umpiring at County and/or National Level. Suitable umpires will normally be selected by the WBUA Panel and invited to undertake this course.

Module 1. The Theory Paper.

Candidates will be sent a paper of 50 questions to be answered in writing and returned to the WBUA Secretary. These questions will be more advanced questions than Level 1 and will concentrate more on interpretation of the Laws of Bowls in addition to the basics. Questions may include scenarios not specifically covered by the Laws, where common sense should prevail.

The WBUA Panel should have several theory papers available to send to candidates in order to ensure a fair test and assessment.

A pass rate of 90% should be achieved to enable the candidate to go on to Module 2.

Module 2. Examination & Assessment

As all candidates will be experienced umpires there should be no requirement for instruction of measuring skills or techniques.

Module 2 will consist of: -

a. A short written examination paper of 15 questions to be answered in 45 minutes. These questions will be more advanced than the Level 1 equivalent and should be completed without the use of the Law Book.

b. Practical Assessment. Candidates will be presented with at least 10 different scenarios and asked to determine the correct resolution. Scenarios will be more advanced than Level 1 and may include some situations considered to be unusual by the WBUA Panel.

Module 3. Marking Assessment

All candidates must fulfil a markers training course before carrying out a marking practical assessment.

The practical assessment shall consist of marking 4 ends of a four bowls singles game, obtaining a pass mark of 80%.

Examination Assessment.

The WBUA Panel will assess the performance of those candidates who completed Modules 1, 2 and 3. Those candidates who, in the opinion of the WBUA Panel, have shown a level of skill, knowledge and confidence to enable them to umpire at International level will be informed by letter/e-mail as soon as practicably possible after Module 2 and 3 are completed. Those unsuccessful candidates will also be informed and may be invited to retake some part of the examination in due course.

3. “Markers Course”.

The WBUA will run as required one day “Markers Courses” designed to fully brief candidates on the principles and practices of good marking in Singles games. This course should be available to all players who have completed the Marking Seminar and Level 1 and Level 2 Umpires.

The course should consist of:

Module 1 – Classroom briefing.

- a. A thorough briefing on the duties of a marker.
- b. Establishment of common practices whilst marking, such as 1. How and where to stand, 2. What to do in certain situations. 3 Communication with players.

Module 2 – Practical demonstration and instruction.

A practical demonstration and instruction of these aspects by the WBUA Panel Tutors

Module 3 - Assessment

An assessment of the candidate’s ability to properly mark a full singles game of bowls in a real-life situation. This assessment will be carried out by authorised members of the WBUA. Successful candidates will be enrolled in the “Markers data base” list held by the WBUA. The assessment will be carried out separately from Module 1 and Module 2 when the candidate has had sufficient experience to be confident of passing the assessment.

4. Continuation Training Programme. (Annual Seminars)

The WBUA will run annual seminars for each of the national districts. The dates and venues for these seminars will be set by the WBUA Management Committee. These will normally take place during the winter at indoor venues, but an additional seminar should be set during the summer months for umpires unable to attend during the winter.

The seminars will be run by the respective area representative together with a Panel member. Record of attendance at the events will be made and recorded. All active umpires should attend at least one seminar every two years.

Seminars may comprise: -

- a. General discussion on recent events or changes to the Laws of the Sport.
- b. Questions on the laws set by the Panel for discussion.
- c. A practical session on the green with set exercises on measuring, marking and interpretation of Laws. The exercises to be recommended by the WBUA Panel.
- d. Election of the relevant area representative/s for the following year.
- e. Any nomination for WBUA Office for the following year.

5. Further Training & Qualifications.

In order to officiate at any World Bowls Ltd event, such as World championships, Atlantic Games or Commonwealth Games, umpires are required to hold International Technical Officer (ITO) qualification. This involves taking written and oral examinations and a practical assessment. Assessment is done by officials of World Bowls Ltd. Further details are available from the WB Ltd web site or from the WBUA Secretary. Any umpires from the WBUA proposing to take this assessment should be approved by the WBUA.

Umpiring & Marking

Guidelines for Umpires

The duties of an umpire are defined within Law 43 of the Laws of the Sport of Bowls – Crystal Mark Fourth Edition. Guidance to help umpires comply with these laws is provided below.

1. Prior to Arrival at the Venue

- Having accepted the appointment, make sure that you have in your possession a copy of the Laws of the Sport (including any Domestic Regulations) and the Conditions of Play which apply to the competition. Become fully conversant with these and have any problems resolved by the Controlling Body in advance of your arrival at the venue.
- Always arrive at the venue at least an hour before the competition is due to start and give yourself sufficient time to conduct the various duties which have to be performed before the start of play.
- Make sure that your dress is smart and tidy, is free from lapel badges and any other such adornments and is in line with the Conditions of Play for the competition.
Umpire members are required to purchase the Association Umpires predominately bottle green shirt, blouse or polo shirt tops, complete with WBUA badge, black trousers, skirts or shorts and to wear them as uniform when officiating as umpires.
Blazers, ties, waistcoats, fleeces and waterproof jackets in predominately bottle green are optional.

2. On Arrival at the Venue

- Report to the representative of the Controlling Body who is in charge of the competition, well in advance (1 hr.) of the start of the game and make sure that you know to whom you can report any problems which require the attention of the Controlling Body (for example, the condition of the green and the conduct of spectators).

3. Prior to the Start of the Game

- Check the width of the rinks of play and the distances of the 2-metre and 25-metre pegs and make sure that the rink boundary pegs, and centre-of-rink pegs are in place. (Recheck these before any subsequent games are played on the same day.)
- Check that the ditches and banks are the correct depth, width and height.
- Ensure that the mats, jacks, any measuring sticks and bowl and jack indicators are present at the end of the rinks. (Recheck these before any subsequent games are played on the same day.)
- Ensure you have your personal umpire's kit with you. When you are umpiring a game, it is advisable to carry most of what you require with you (either in your pockets or in a suitable carry-bag) and leave your umpire's case on the bank away from but close to the area of play. If appropriate, make sure that you have your drinks bottle with you.
- Items that you should be able to comfortably carry with you are feeler gauges, calipers, wedges and box and string measures. It may also be appropriate to carry a cloth on which to kneel. A 30-metre tape can also be carried. Any items which are not needed when you are called onto the green should be left on the bank. If you need a boundary scope or square, you can collect them from a central location at the end of the green.
- If you have not brought your own umpire's kit, check that the umpire's equipment is complete and in good working order.

- Check that the bowls have a date stamp which complies with the Conditions of Play (check Domestic Variations for WLB & WIB) and have only one adhesive sticker on each side (if stickers are being used) and also that each player's bowls are all from a matched set.
- During any introduction or preamble to the game make sure that the skips / players are aware of who you are and that you identify any team managers present.
- Keep your remarks during any preamble to an absolute minimum, confining them to any *new* information of which the players may not be aware. For example, avoid restating any Laws of the Sport and Conditions of Play and avoid using phrases which may suggest that you have an officious manner.
- If working with a fellow umpire, establish which clock you will use (if the competition is being played within time limits) and, in a shared measurement, which of you will make the decision.

4. During the Game

Position on the Green

- Remain by the side of the green whilst play is in progress.
- Adopt a position from which you can perform your duties and move around the green in the most efficient way whilst, at the same time, avoiding any undue disturbance to spectators. When two umpires are on duty the following method of operation is preferred (subject to obstruction of or by spectator seating).
 - the position of the first umpire is at the north / west corner - to deal with any matters arising on any of the rinks when play is at the north / west end of the green.
 - the position of the second umpire is at the south / east corner - to deal with any matters arising on any of the rinks when play is at the south / east end of the green.
 - the first umpire moves around on the north / west side and the second umpire moves around on the south / east side.
- Avoid remaining in one position throughout the game. Be seen to be moving around the green (subject to any restrictions such as spectator seating), to be watching the progress of play and to being alert to what is happening on the green. Your aim is to be in the best position to offer assistance when called upon.
- Whilst the game is in progress, keep alert and try to be aware of everything that is going on on the green. For example, if you notice that the jack or a bowl is heading towards the side of a rink, move towards that rink in anticipation of being asked to check whether it is live or dead. Anticipation is the key to good umpiring.
- When the result of an end is being decided and the players are measuring, move towards that rink so that, if they cannot make a decision and call for the umpire, you are close at hand.
- When moving around the green, do not disturb a player's concentration by walking behind the head when a player at the opposite end of the rink is preparing to play a bowl.
- Where restrictions such as spectator seating and perimeter fencing make it impractical to access a rink directly from the bank, make sure that you walk across any adjoining rinks as close to the ditch as possible without disturbing either any heads or players (that is, avoid walking across an occupied rink between the mat and the head).
- Watch a jack being delivered. If it looks short, be ready to be called upon to measure the length of jack.
- When you go to carry out a measure, ask the players which bowls are to be measured and ask them to remove any bowls not in contention (never remove them yourself).
- Wedge any bowls which are on their running surfaces or are leaning.

- Normal practice is to measure a bowl that is lying flat first to set the measure.
- If the players stand over you when you are carrying out the measure, ask them to stand well clear of the measure (for example, either at the edge of the ditch or on the bank).

General Awareness

- Make sure that the banks are kept clear of extraneous objects (bowling bags, articles of clothing and so on) and that no object (for example, the mat) is allowed to overhang the face of the bank.
- Ensure that any indicators used to mark the position of a jack or a bowl in the ditch are removed from the face or top of the bank prior to the start of the next end played in that direction.

General Conduct

- Be courteous at all times.
- Do not normally interfere in any situation which arises on the green unless requested to do so by the skips in a team game or by either player or the marker in a Singles game. There are times, however, within the Laws of the Sport when you may have to become involved without such a request (for example, foot-faulting, possession of the rink and if the skips make a decision that is not in line with the laws).
- Make sure that your concentration is not broken due to
 - getting involved in duties which are outside your concern (for example, updating either rink-side or central scoreboards)
 - paying prolonged or close attention to what is happening during one specific game on the green on which you are officiating or on an adjoining green (for example, watching a game in which a friend or club-mate is playing)
- whilst contact with spectators or officials cannot always be avoided when play is in progress, keep to an absolute minimum conversation with anyone not directly involved in the game. Always maintain eye contact with the green during any such conversations.

5. On Completion of Each Game

- At the end of the game, collect the score cards as soon as play finishes on each rink.
- Check that the score cards are correct in every respect, then pass them to the appropriate person for recording purposes. This should include checking that: -
 - the names of all players are on both cards
 - scores on both cards have been recorded against the correct number of ends which should have been played
 - the scores on both cards are the same when compared on both an end-by-end and last-end basis
 - both cards have been signed by both skips and they have recorded the time the game finished.
- When you have collected all the cards make sure that they are returned to the appropriate representative of the Controlling Body.

Guidelines for Markers.

Ref. World Bowls Ltd Laws of the Sport of Bowls – Law 42.

This document provides markers with guidance on how to perform their duties before, during and after a game. The topics covered are:

Before the game:

Presentation, introductions, equipment and knowledge (of the Laws of the Sport in particular).

During the game:

Positioning, communication of information, running / firing bowls, measuring, time management

After the game:

Score card administration.

Marking is an art and, like all other arts, takes time to master.

The marker is an important official. A good marker can 'make' a game whilst a bad marker can ruin a game. The players deserve the best standards of a marker.

You will no doubt have been involved in marking club competitions or may already be an experienced marker at a higher level. Whatever standard you are, the guidance given in this document should help you develop the skills you need to become a competent marker.

Before the Game

Presentation

Your duties as a marker start at home. Be aware of the dress code expected of the players for your game – and make that your standard unless advised otherwise. For example, if the players will be wearing white/black trousers, then you should wear white/black trousers. Your preparation will have an effect on how you present yourself - the better presented you are the more confidence you will have to do the job well.

Marker members are required to purchase the Association Markers predominately white polo-shirt complete with WBUA badge, black trousers, skirts or shorts and to wear them as uniform at all official appointments.

Fleeces and waterproof jackets (white) are optional. At events when more than one Marker is on duty, all Markers should wear the same style uniform.

Introductions

On arrival at the venue, introduce yourself to any representatives of the Governing Body who are present, your fellow markers and the umpires on duty. If an umpire has not been appointed, identify a competent third party to act as the umpire.

Before starting the game, introduce yourself to the players and tell them that you would like time to centre the mat before they deliver the jack, that you will mark touchers before the next bowl is delivered and that you would like permission to remove dead bowls from the ditch or green as soon as they come to rest.

You should also ask the players if they would prefer to have distances given using imperial (feet and inches) or metric (metres) measurements.

Seek clarification from the players if they wish to do the measuring or if they are happy that you should do it. Remind them of the presence of the umpire as a measuring option.

Equipment

Carry the minimum of equipment with you when on the green.

Normally you will need to carry a chalk spray or chalk, a box string measure, two or three wedges, a pen or pencil, a coin and, if required, shot indicators (lollipops or paddles).

Do not carry any items in your pockets that could easily fall out (for example, small coins mixed in with a handkerchief).

Also, do not carry items such as wallets or purses and mobile phones – they should be kept in a secure location when you are on the green.

Make sure that all the necessary measuring equipment (additional wedges, string measure, 30-metre tape, callipers, boundary scope, and so on) are readily to hand. It should not be necessary to do this when an umpire is present.

Knowledge

Good measuring techniques are an important part of a marker's armoury. Be conversant with how to apply the correct techniques when using each individual piece of measuring equipment – particularly those for using a box string measure and callipers. A document explaining the measuring procedures which should be followed (titled 'Measuring Procedures') is available in the 'Umpire Development' section of the World Bowls website.

A marker must have a thorough knowledge of law 42 which describes the marker's duties. The Appendix to the Crystal Mark Law Book gives markers guidance on how to meet the requirements of this law. In addition to law 42, there are a number of other specific laws that a marker must be familiar with:

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During the Game

Positioning

After the mat has been centred and the jack delivered, centre the jack with your hand (never use your foot).

Don't hesitate to check a dubious jack length (for example, 23 metres for a delivered jack). Have the length checked using the 30-metre tape if necessary.

Your position on the rink is important for two reasons; you should not obstruct a player's view of any pegs or indicators on the bank and you should also be in a position where you can see and act quickly upon anything that happens in the head. For these reasons, the ideal position is to stand approximately one metre (two paces) to the rear of and one metre to the side of the jack.

Do not move when a player is on the mat ready to deliver a bowl.

Remain on the green at all times if possible.

If the jack goes into the ditch, stand to one side of the rink (not on the bank).

Communication of Information

Mark with chalk all touchers as soon as they come to rest.

Put marks on both sides so that the bowl does not have to be picked up to be checked if moved from its original position.

Use bowl and jack indicators to show their position in the ditch.

Remove the indicators when the end is completed.

Make sure that you are alert at all times. Try to anticipate questions so that you have the answers ready. When a bowl is on its way up the rink, take a step forward and to the side of the head to check the distances of any key bowls already in the head and which bowls are shot. You will then be ready to answer the next question without having to re-visit the head.

Be as accurate as you can when giving distances. For example, if a bowl is 45 centimetres (18 inches) short do not say that it is 60 centimetres (two feet) short - players will quickly lose confidence in you if you do.

Only answer questions asked by the player in possession of the rink, remembering that possession of the rink passes to the opponent as soon as a bowl comes to rest, allowing time for marking that bowl as a toucher.

Only answer the question asked and be concise. For example, if you are asked "Am I holding shot" – then answer "Yes".

In general, don't provide information that has not been asked for! Equally, use common sense. For example: if you are asked "Am I holding shot" and the player is holding two shots, you should say; "Yes, you are holding two".

If you are unsure which is shot bowl, don't be afraid to say that it is a measure. Don't be forced into making a decision when you are unsure.

It is important to have an understanding of the type of questions which players are likely to ask and to be able to anticipate the information that they are looking for – you are their eyes at the head. For example, if a player asks, "Is that bowl jack high?" and the bowl is not exactly jack high, tell the player how far short or past jack high it actually is.

If a player asks you to show them the position of the jack, hold your hand directly above the jack for a second or two.

Running / Firing Bowls

Move to the front of the head when a running bowl is delivered - you will be in a much better position to see if the bowl becomes a toucher and to avoid moving objects if you do so.

Whenever possible make neighbouring rinks aware of any imminent running / firing shot and ask them to help contain bowls if necessary.

Be aware of play on neighbouring rinks. You must stop a bowl or any other neutral object from a neighbouring rink that is likely to disturb the head on your rink.

Never move a bowl except for a bowl declared dead – dead bowls must be removed before the next bowl is delivered.

Do not engage in conversation with the players unless they want you to.

Do not stop or catch bowls which are about to enter the ditch – even if it looks as though they may disturb another bowl or jack already in the ditch. Let them fall – making sure that you know the position of any bowl or jack that would need replacing if it were to be moved.

Measuring

Under no circumstances should you move a bowl at the completion (real or perceived) of an end.

Keep out of the head whilst the participants decide the result. (The players must agree on the result.)

If you are asked to measure for shot, make sure that you know which bowls you are being asked to measure and ask the players to remove all bowls not in contention where practicable. Don't measure unless asked to do so by both players.

Have wedges to hand if there is a leaning bowl that may require to be measured. Use the wedges where appropriate before measuring - remembering that 30 seconds may elapse from the time the last bowl of the end came to rest if one of the players requests it.

If a measure is too close for a box string measure or you cannot decide the shot, call for the umpire. Point to the bowl you believe is shot after completing your measure. Do not move it as the players may want to call for an umpire for confirmation.

If you need to call for an umpire, try to make them aware of what equipment will be needed. Give the umpire as much information as possible – for example, about the number of shots already conceded and what has to be measured.

Make sure the players are aware of the score throughout the game. You must tell the players the running score at the completion of each end (if scoreboards are not being used).

Time Management

Markers' use of their time can make a big difference to the way a game is played and to the overall way in which the markers' actions are perceived by players and spectators.

For example, a marker who is either constantly rushing around or holding up players whilst writing the score card or turning over the scoreboard can adversely affect a player's concentration.

Practice a routine that you can use in every game you mark. You will soon appreciate that there is no need to rush around and your confidence to deal with the unexpected will improve.

Typical time management techniques include the best time to complete the score card and your position on the rink as the players agree the shots.

Other techniques include:

- moving to the front of the head to wait for the players to decide the result of the end.
- entering on the score card only the score for winner of the end when it is agreed by the players and completing the remainder of the scores after you have centred the jack for the next end.

When the last bowl in an end has come to rest:

- remove any jack or bowl indicators from the bank
- move to the front of the head to wait for the players to decide the result of the end.

When the players have decided the result of the end:

- confirm with the players the number of shots scored and by whom
- tell the players the running totals of the scores (if scoreboards are not being used)
- walk quickly to the other end (displaying lollipops if required)
- remove from the green the mat used in the previous end.

At the start of the next end:

- check that the mat has been properly positioned
- centre the jack
- as the first bowl is on its way up the green, update the score card and check that the scoreboard is correct.

After the Game

Score Card Administration

When the game has been completed, the marker must make sure that the score card:

- contains the names and signatures of the players
- contains the time at which the game was completed
- is handed to the umpire or, if no umpire is present, is dealt with in line with the Conditions of Play.

Practice Makes Perfect!

Set up a jack and bowls and try to judge distance

Set up a jack and bowls and carry out measures using all of your equipment (including wedges).

Mark as many games as you can to fine-tune your time management techniques

ESSENTIAL FACTS AT A GLANCE

TOPIC	REFERENCE	MINIMUM VALUE	MAXIMUM VALUE
MAT	Length	600mm	NA
	Width	360mm	NA
JACK	Diameter	63mm	64mm
	Weight Outdoor	225g	285g
	Weight Indoor & Outdoor Synthetic	382g	452g
GREEN	Size Outdoor	31M	40M
	Size Indoor	34M	40M
RINKS	Width Outdoor	4.3M	5.8M
	Width Indoor	4.6M	5.8M
BOUNDARY PEGS OF OUTSIDE RINK	Min. distance from side ditch	Outdoor 600mm Indoor 460mm	NA
DITCHES	Width	200mm	380mm
	Depth	50mm	200mm
BANKS	Height above Green Level	230mm	NA
LENGTH MARKERS	Minimum length markers	25M from Front & Rear ditch	NA
MAT PLACEMENT	Minimum	2M from Rear Ditch	25M from Front Ditch
DELIVERED JACK	Minimum Length	23M	NA
	Position	Minimum of 2M from Front Ditch	NA
REBOUNTING JACK	Minimum from Mat Line	20M	NA
DELIVERED BOWL	Minimum length	14M	NA
BOWLS STAMPING	WLB	Stamp valid until no longer clearly legible	
	WIB	Stamp valid until no longer clearly legible	
	Internationals & British Isles	As required by Controlling Body.	

The Umpire's Kit

An Umpire's kit is as individual as the person who owns it; however, there are a number of basic items of equipment that should be present in every kit. Examples can be seen in the photos.

Additional gadgets, spare measures and odds and ends will be collected over time and this is why no two kits are identical. Basic kits are available to purchase from reputable suppliers and are a good starting block for new Umpires.

Your course tutor will show you these essential items and allow you to delve into his/her own personal kit. Do not be afraid to ask if there is an item that you do not recognise

Box String Measure

There are many different models on the market and you will use the measure that you feel most comfortable with. Metal Tapes can be used but are not ideal. We recommend a String Measure such as the one shown. These are suitable for measures of between 20cm and 3 metres. It is worth keeping two measures in your kit in case you need a spare.



Callipers

Spring Callipers are available in a range of sizes but the most suitable sizes for Umpires kits are 8 to 12 inch versions. Ensure that you obtain the external versions. Good quality engineers Callipers will last a long time and are worth the extra investment. They can be used for measures of 2cm to 30cm. Avoid using the small Callipers attached to a String or Tape measure, as they are difficult to control. Keep two or three different sizes.



Wedges

Wedges can be purchased from Bowls suppliers, made from off cuts of wood or made from Erasers. Rubber wedges have better holding power especially on indoor carpets. Aim to keep at least 4 wedges in your kit but you can never have too many. A set of small round rubber wedges and jack wedges are available and are excellent for awkward spaces.



30 metre tape

A nylon or metal long tape is essential for measuring rinks and jack lengths etc. A retractable 30m metal tape is commercially available and is one of the most popular types. A nylon version is ideal in wet weather as it will not rust.



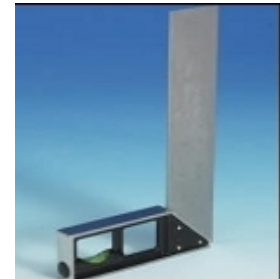
Long String

A simple string measure as shown is cheap and effective for measures up to 5 metres. A chalk plumb line can be purchased and the string substituted for fishing tracer or other non-stretchable cord. A string of at least 40 metres will double up as a boundary line if needed and will cope with the longest measure you are likely to encounter.



Set Square

A combination square containing a small level, as in the photo; will be ideal for the awkward occasions when jack or bowls are in the ditch. A Carpenters Set Square will be sufficient for most kits.



Feeler Gauges

A small set of feeler gauges will be sufficient for a basic Umpires Kit. Remember that the largest width you can measure with feeler gauges must be greater than the smallest width you can measure with your Calipers. It is worth investing in good engineers set and looking after them.



Chalk

Always carry some chalk for checking Bowls and for marking touchers during singles.

A chalk puffer is recommended but be aware that some indoor clubs do not allow their use.



White Strips

Pieces of white card or plastic approximately 2cm x 15cm will be ideal for sliding under very close bowls before commencing a feeler gauge or close calliper measure.

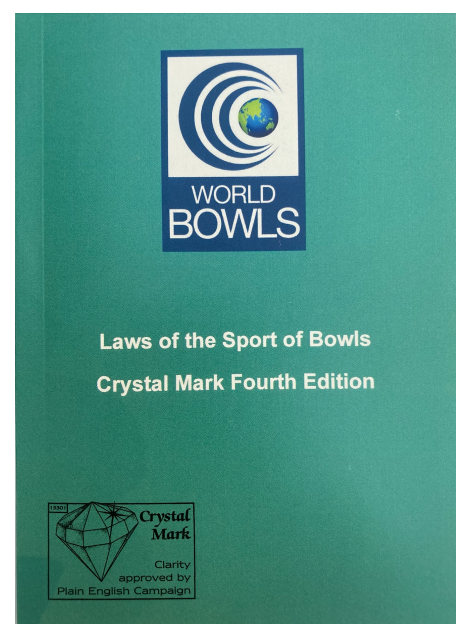
Pen & Notepad

Pen and paper are essential for making notes, recording times etc.

Laws of the Sport and Competition Rules

Always carry your Law book in your case and don't be frightened to use it to answer questions. You are not expected to learn the Laws of the Sport "parrot fashion" and it would be more embarrassing to quote a Law incorrectly than to refer to the book.

Also carry copies of the local competition rules; the current National Handbook is often a good reference.



The Marker's Kit

As a Marker in a game of singles you will need some basic equipment. The type of equipment you carry will depend on whether an Umpire is present, as he/she will carry all the kit needed during a game, meaning you do not have to carry as much in your pockets.

The following are the basic items of equipment that you should carry as a Marker:

String Measure

Carry a small box string measure like the one shown in the photo above. Don't forget that the players have the right to measure any shots and it will be useful if you have a measure they can use if needed.

Wedges

Always carry wedges when marking. You may be asked to secure any bowls that are leaning and you will need to wedge any bowls before you measure. It is also helpful to wedge bowls for the Umpire before he is called.

Chalk

A chalk puffer is recommended for marking touchers but be aware that some indoor clubs do not allow their use.



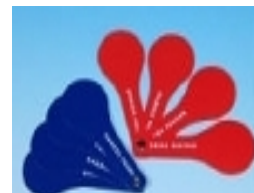
Card Holder & Pen

In order to keep the scorecard neatly, you may wish to carry a scorecard holder. If wearing a jacket keep them in your inside pocket so they are not on show. Do not put them in any pocket where they are likely to fall out and disturb the head or a measure. Keep a pen and a spare just in case one fails. If it is raining it is a good idea to use pencil rather than pen.



Lollipops.

You may be required to use Shot Indicators or Lollipops. These should be provided for you by the Controlling Body.



Coin

Keep a coin in your pocket for the toss at the start of the game.

Tips for Measuring

It is unlikely you will be called to give a decision unless it is a difficult one, a close one or a very long one. Therefore, you have to be confident in your own ability to do the job asked of you. Show the players that you are competent because on your decision one team will lose and the other win. No one will fault you if you prove to be capable and show it.

The following tips and procedures should be used whenever you are asked to carry out a measure either as an Umpire or as a Marker.

General Procedures for Conducting a Measure

- Make sure both sides want the Umpire. It could be that one Third called but the other wanted his skip to measure first.
- Make sure you know what it is you have been called for, which bowls you have to measure. ASK the question.
- Ask for bowls not in question to be cleared from the head.
- Wedge bowls; don't be afraid to use plenty. Bowls can fall or be pushed in any direction. Once you know bowls are secure, you will measure with confidence.
- Make yourself comfortable and steady before starting the measure
- Where the measure is close i.e. when using feeler gauges, place white strips of card or plastic on the ground below the points of contact of the measure to improve visibility.
- Do not waggle the pointer or touch the bowl if it does not pass it.
- Do not move the bowl(s) or jack whilst measuring
- Recheck the first measurement to ensure that your measurement is correct. When sure, carefully remove the bowl that you have decided is shot.
- If the bowl to be measured is obstructed by another bowl leaning on it, carefully remove the obstructing bowl after carefully wedging the leaning bowl.
- NEVER put your foot, knee or hand in the ditch.



Tips for Umpires

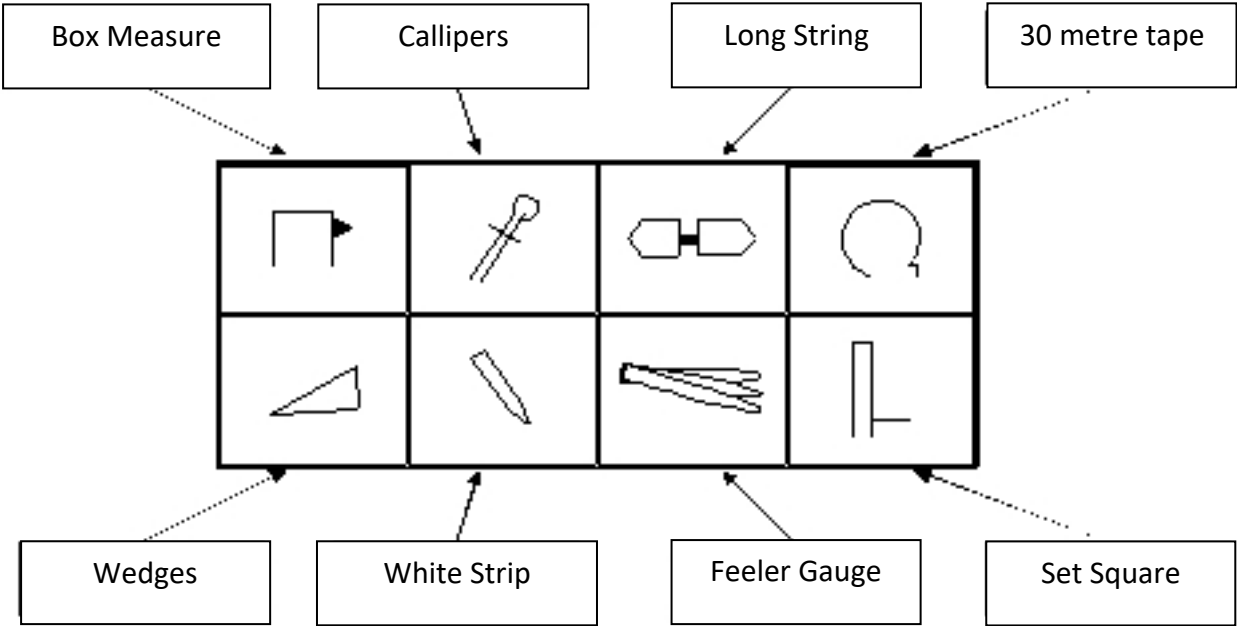
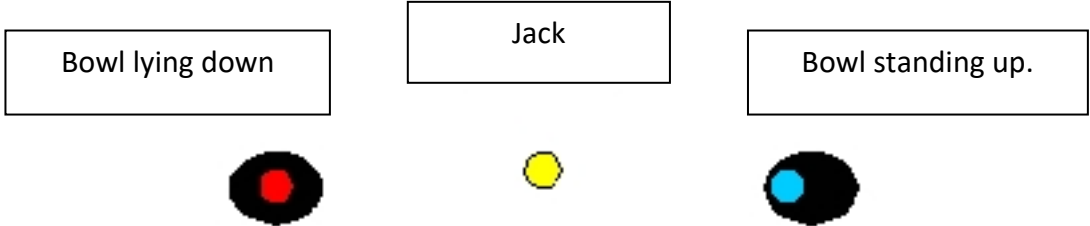
The following tips should be read in conjunction with the General Procedures for Conducting Measures.

- Never run or hurry, take your time.
- Make sure your tools are close at hand. If you walk round the green, take your tools with you.
- Don't walk across the green, always around the path to the rink that called you.
- Be aware of players on the mat so you do not disturb them.
- Check if any bowls have already been counted and ensure opponents agree on that amount.
- Carry a clean duster on which to kneel when outdoors
- For a measurement that requires assistance, you can use whomever you like. It is better to use a neutral person if possible. If you are working with another Umpire always use them. Give positive instructions to players or non-umpires on the use of the equipment and what you expect them to do. Make sure your assistant holds the fixed end at the jack and you take the decision end to the bowl.
- Collect your tools and move to the bank, confident of your judgement. Do not discuss the matter or pass comment.
- Always carry your Law Book.
- If you have a boundary line decision, make sure the line is straight.

Tips for Markers

The following tips should be read in conjunction with the General Procedures for Conducting Measures.

- If it looks like a measure is required, wait at the head for the players to take a look.
- Let the players make the decisions; do not suggest anything to them but get confirmation of the number of shots declared.
- Remember the 30 second rule and apply if it necessary.
- Players may wish to measure themselves; lend them your measure if they need one.
- Do not attempt measures of less than 15cm, call the Umpire to use callipers.
- Let the players see your decision, and let them decide to concede the shots.
- NEVER turn out bowls that you deem to be shot. The players can ask for an Umpire
- Call the Umpire if it is too close for you to make an immediate decision.



Measuring Exercise Table

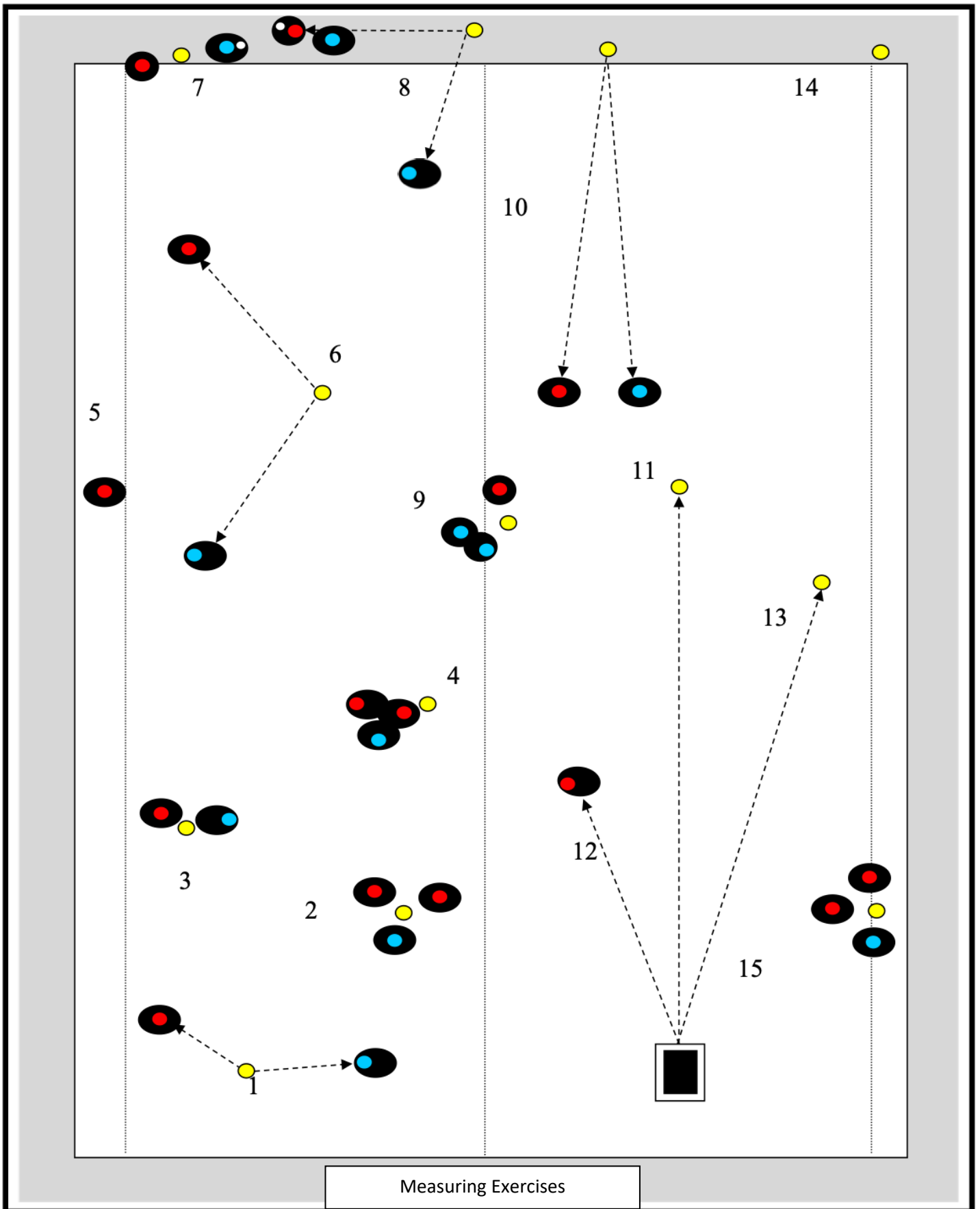
Exercise	Tutors Set Up Instruction's as per the diagram on page 7	First Choice Equipment	Alternative Equipment
1. A standard measure between bowls and jack that are on the rink surface	Place bowls at an angle to each other at a distance of between 400 mm and 800 mm from the jack. One bowl to be tilted.	Box string measure	Telescopic measure Bullet string measure Laser Measure
2 A calliper measure between bowls and jack that are on the rink surface.	Place bowls at an angle to each other at a distance of between 10 mm and 200 mm from the jack.	Callipers	
3 A feeler gauge measure between bowls and jack that are on the rink surface.	Place bowls at a slight angle to each other with a gap of less than 5 mm to the jack. One bowl to be tilted.	Feeler gauges and white strips	
4 A calliper measure between two 'second shots' resting on the shot bowl.	Place two opposing bowls leaning against a bowl which is 1-5 mm from the jack. The "shot" bowl should prevent a direct measure between the jack and the two opposing bowls.	Callipers	
5 Bowl on the rink surface on the boundary line.	Place a bowl either just over or just on the rink boundary line. There should be no boundary string placed on the rink surface.	Boundary string and square Boundary scope	Liner siter. Mirror and square
6 A long distance measure between bowls and jack that are on the rink surface.			
7 Calliper measure with a toucher and jack in the ditch and a bowl overhanging the ditch.			
8 String measure with a toucher, non-toucher and jack in the ditch and a bowl on the rink.			
9 Last bowl of the end has been played. Two bowls on boundary line equidistant from the jack with one of the bowls resting on a dead bowl.			

Exercise	Tutors Set Up Instruction's as per the diagram on page 7	First Choice Equipment	Alternative Equipment

Note 1 (exercise 9): The candidate should first of all check which of the three bowls are live and which are dead. At this point, only the bowl on which another bowl is resting is dead. The bowl should be removed and the resting bowl should be allowed to remain where it falls (it should not be wedged while the dead bowl is being removed). That bowl should again be checked to see if it is still live. If the resting bowl was not dead when it fell, a measure would have to be undertaken to decide the shot.

Note 2 (exercise 15): This exercise is designed to test the candidate's ability to deal with the sort of unusual situation which can be encountered from time to time. If the candidate does not use a boundary string, the exercise cannot be conducted using the equipment in the normal fashion - a square cannot be placed on the rink of play next to the jack. The candidate must, therefore, find another method for defining the edge of the jack.

Measuring Exercises Diagram



EXERCISE 1

Standard measure between two or more bowls

The box string measure is suitable for measures of more than 15cm between two or more opposing bowls. Only the length of the string limits the maximum distance.

An alternative method is described for using a Telescopic Measure.

Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Place the fixed pointer of the measure against the jack, with the string extended a short distance, facing the bowl to be measured.
- Ensure the measure is in a straight line between the jack and object bowl.
- Hold down the release button and carefully extend the string until the tip of the pointer just touches the bowl.
- Release the lock on the measure and check that the measurement is straight and accurate before moving to the next bowl.
- Without altering the setting of the measure, move the measure so that the fixed pointer is against the jack and the measure is pointing towards the second bowl to be measured.
- Extend the string and check the measure against the second bowl by passing the pointer down from the top to the bottom and from side to side.
- Recheck the measure against the first/reference bowl before indicating shot/s.

EXERCISE 2

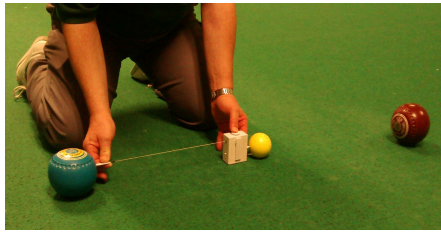
Calliper measure

A close measure between two or more opposing bowls.

This procedure will also be used in Exercises 4 and 7.

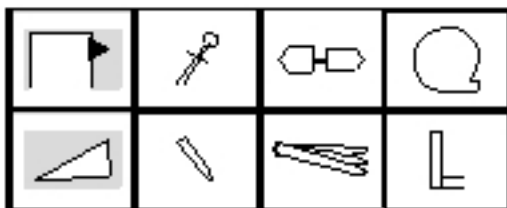
Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Kneel on the green and set the Callipers at a distance that seems appropriate to the distance to be measured. Start with the Callipers set at a distance that is less than the distance to be measured.
- Steady the hands by resting them on the green and move the Callipers from the top to the bottom between the jack and bowl. As the bowl is the heavier object and less in danger of moving initial contact is made with the bowl and not the jack.
- Remove the Callipers from between the bowl and jack to make any adjustment well away from the bowls and jack to avoid movement.
- Open the Callipers gradually and repeat until bare contact is made with both bowl and jack.
- Without disturbing the setting, move to the second bowl and pass the callipers through the gap from top to bottom; if they do not pass through, do not force them. Again use the bowl as the fixed point.
- Recheck the measure against the first/reference bowl before indicating shot/s.
- Remember, the measure is made from the closest points on the bowl and jack so the Callipers must be on an incline.



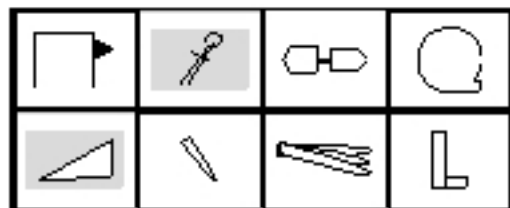
EXERCISE 1

A measure between two or more bowls



EXERCISE 2

A close measure between two or more bowls



EXERCISE 3

Feeler Gauge measure

A very close measure between two opposing bowls

Rarely will you use the feeler gauge but it is important that you practice and are competent with the tools as your nervousness will be more evident when using them.

Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Place a strip of white card or plastic on the green under each bowl and the jack to improve visibility.
- Choose a selection of gauges that seem appropriate to the measure to be made. Start with a selection that has a combined thickness less than the distance to be measured.
- Steady both hands on the green.
- Carefully pass the gauge down between the first bowl to be measured and the jack using the bowl as a firm object and with the flat surface of the gauge facing the bowl and the jack. Do not slide them down the jack. Do not force the feeler gauge between the bowl and the jack.
- The feeler gauge is on an angle to allow for the nearest point of the jack and bowl being at different heights.
- If the gauge does not pass between the bowl and the jack, do not force them, reduce the gauge and reduce the thickness and try again.
- If the gauge passes between the bowl and the jack, remove the gauge and increase its thickness and repeat the above steps until there is bare contact with the bowl and jack.
- Without disturbing the setting of the gauge, move to the next bowl and try the gauge through the gap between the bowl and jack.
- Always return to the original bowl to recheck your measurements before indicating shot/s.

EXERCISE 4

Intervening Bowl

A measure between two opposing second bowls, one of which is leaning and blocked by the shot bowl. This exercise is designed to ensure you can secure leaning bowls before commencing the measure.

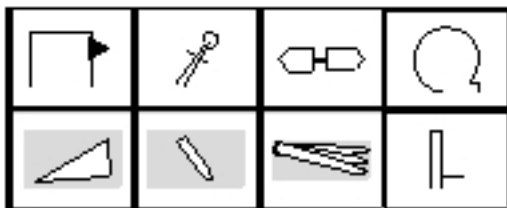
Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Use plenty of wedges and push them under the leaning bowls carefully but firmly.
- If the Jack is touching the shot bowl it is acceptable to carefully wedge the Jack.
- When you are confident the bowls are secure, carefully try to remove the obstructing bowl by lifting it carefully over the bowls from behind using both hands. If anything moves, stop and re-secure.
- Once you have removed the obstructing bowl you can confidently continue with the measure using the procedures described in other exercises.



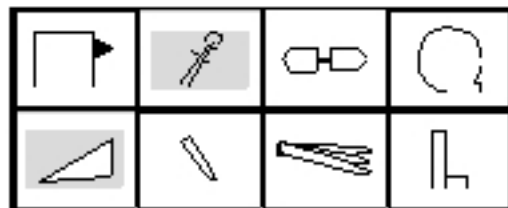
EXERCISE 3

A close measure between two opposing bowls



EXERCISE 4

Intervening Bowl



EXERCISE 5**Line Bowl and / or Jack**

The long string measure is suitable for determining whether a jack or bowl is within the boundaries of the rink of play. The methods of use differ depending on whether the boundary markers are on the face of the bank or on the top of the bank.

This procedure will also be used in Exercises 14 and 15.

Alternative methods are described for using a Boundary Scope, Mirrors and Set Squares.

Procedure for when Boundary Markers are on the face of the bank

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Ask one assistant to take the loose end of the string to the far end of the rink away from the decision.
- Ask them to place the string on the top of the bank and in line with the centre of the rink boundary marker.
- Ask another assistant to take the other end of the string to the opposite end of the rink and keeping it taut place it on the top of the bank and in line with the centre of the boundary marker.
- Ensure that at no time does the string come into contact with the bowl or Jack by holding it above the objects.
- Look down over the objects to see if you can make a decision.
- If not, ask the assistant nearest you to slowly move the string down the centre line of the boundary marker and stop when the string is just above the bowl or jack.
- Determine if the bowl is live or dead by looking down over the top of the object or use a Set Square.
- Slide the Set Square up to the object until it just touches either the string or the object.
- Make your decision and indicate to the players the result.
- Quickly re-wind your string and move from the rink to allow the game to continue.

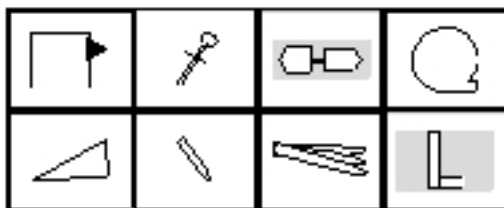
Procedure for when Boundary Markers are on the top of the bank

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Ask one assistant to take the loose end of the string to the far end of the rink away from the decision.
- Ask them to place the string on the top of the bank and in line with the centre of the rink boundary marker.
- Ask another assistant to take the other end of the string to the opposite end of the rink and keeping it taut place it on the top of the bank and in line with the centre of the boundary marker.
- Ensure that at no time does the string come into contact with the bowl or jack by holding it above the objects.
- Look down over the objects to see if you can make a decision.
- If not, slide a set square up to the object from the side of the rink of play until it just touches either the string or the object.
- Make your decision and indicate to the players the result.
- Quickly re-wind your string and move from the rink to allow the game to continue.



EXERCISE 5

Line bowl and/or jack



EXERCISE 6

Box / Long string measure

The string measure is suitable for measures beyond the reach of a box string measure or when a jack or bowl is in the ditch and a flexible measure is needed.

If the distance to be measured is longer than you can comfortably reach, seek assistance from another umpire or a player. Your assistant will take the jack end and you take the decision end to the bowl.

This procedure will also be used in Exercises 8 and 10

Procedure:

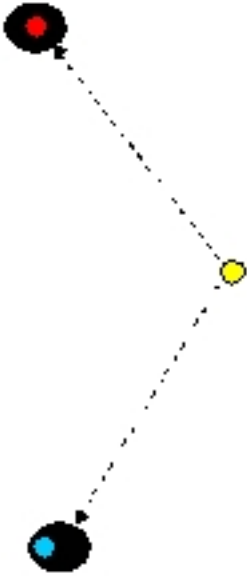
- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Maintain communication with your assistant or fellow Umpire at all times. Instructions to your assistant should be very clear and precise.
- When using a long string measure both Umpire and Assistant should be positioned behind the bowl or jack respectively.
- Have your assistant place the fixed end of the measure against the jack.
- Extend the string to the first bowl.
- Check with your assistant that the pointer is on the Jack and that the string is in a straight line from jack to bowl before you set your measurement.
- Instruct Assistant to move pointer away from jack before moving to next step. Repeat this instruction at each stage.
- Without altering the measurement, check the measure from the jack to the second bowl.
- If the measure is to an object in the ditch, make sure that the string crosses the ditch in a straight line between the jack and the bowl. Also, make sure that the string does not cut into the green at the point where it crosses the edge of the ditch.
- Always return to re-check your measurement against the first bowl.
- If the bowl you have decided is closest to the jack is in the ditch, check to ensure that it is live.

EXERCISE 7

Toucher and jack in ditch with bowl on the rink over-hanging the ditch

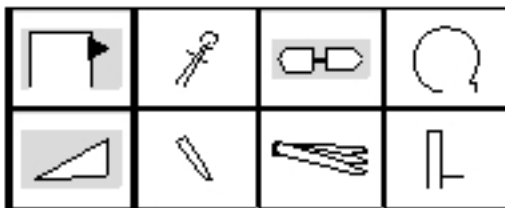
A close measure between a bowl and the jack in the ditch, made complicated by a bowl over hanging the ditch. Only use callipers for a ditch measure if a direct line is available between the bowl and the jack.

To carry out this exercise, follow the procedure described in exercise 2



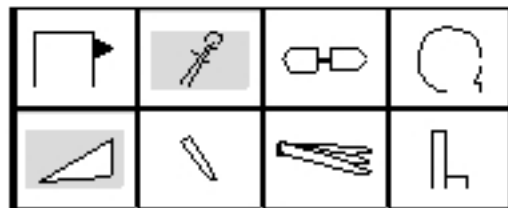
EXERCISE 6

A long measure between two opposing bowls



EXERCISE 7

Toucher and jack in the ditch with a bowl on the rink overhanging the ditch



EXERCISE 8**Jack, touchers and non-touchers in the ditch
with one or more bowls on the rink**

The string measure should be used for when a jack or bowl is in the ditch and a flexible measure is needed. Box measures should not be used for ditch measures in any circumstances as the box will not find the correct levels. Always seek assistance from another umpire or a player. Your assistant will take the jack end and you take the decision end to the bowl. Ditch measures can be difficult and cramped and common sense should be used in all cases.

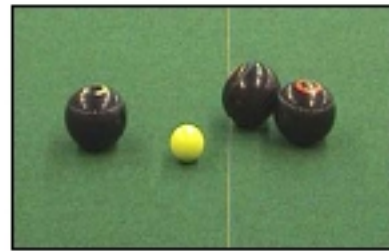
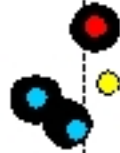
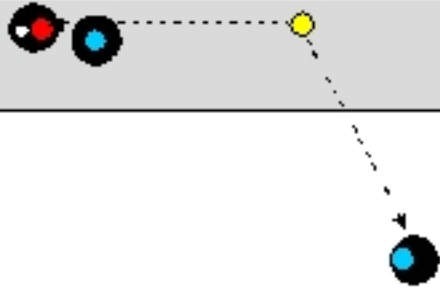
To carry out this exercise, follow the procedure described in Exercise 6. Ensure non-touchers are removed from the ditch.

EXERCISE 9**Bowls resting on each other on boundary line**

A boundary bowl is resting on a dead bowl from the same rink and is required to be measured.

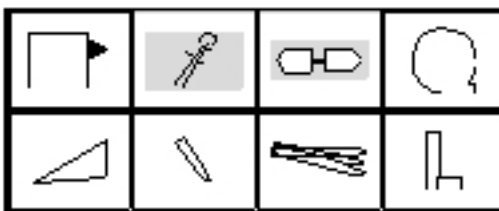
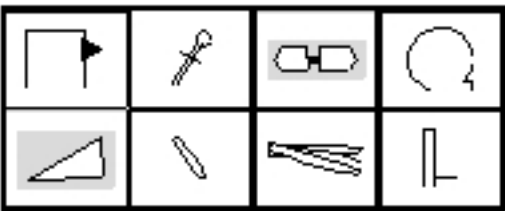
Procedure:

- The bowl that is holding the leaning bowl is dead and should be removed from the green.
- The leaning bowl **should not** be wedged but allowed to remain where it falls.
- You may have to determine which bowls are dead and live by following the procedure in Exercise 5
- When dead bowls have been removed carry out any measures required using the procedures detailed in previous exercises.



EXERCISE 8
 Jack and bowls in the ditch
 with one or more bowls on
 the rink

EXERCISE 9
 Bowls resting on each other
 on the boundary line



EXERCISE 10

Long string measure from the jack in the ditch to bowls on rink

A jack has been driven into the ditch and has left a measure between 2 bowls a long way back up the rink. The string measure is suitable for when a jack or bowl is in the ditch and a flexible measure is needed. You will need to seek assistance from another umpire or a player. Your assistant will take the jack end and you take the decision end to the bowl.

To carry out this exercise, follow the procedure described in Exercise 6

EXERCISE 11

Challenged jack length

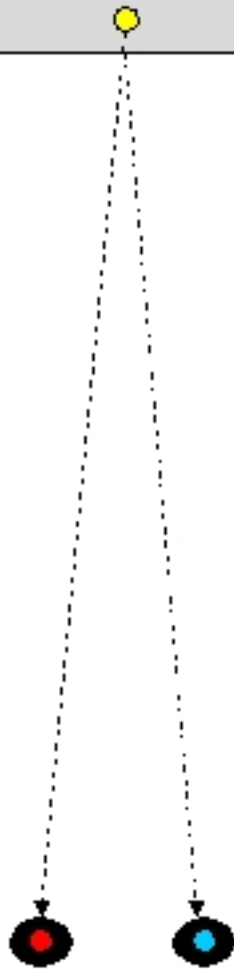
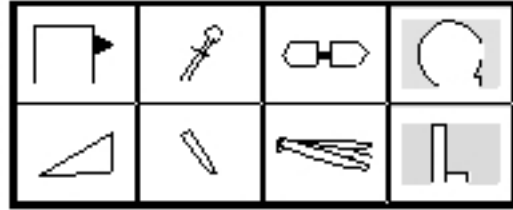
Law 10.1 requires that, for a jack to be delivered properly, it must end its course at least 23 metres in a straight line from the front edge of the mat after the jack has been centred.

Law C.20 states that all measurements to the jack and bowls from the mat are taken from the centre of the mat line.

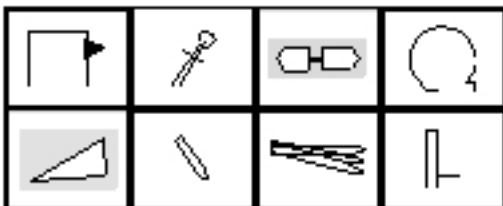
Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Ensure the jack is centred.
- Check the front edge of the mat is at least 2 metres from the rear ditch and at least 25 metres from the front ditch. If it is not, return the Jack to be re-delivered by the opposing player.
- Have the end of the long tape held by the marker, another umpire or a player at the centre of the mat line with the zero at the mat line. Alternatively, spike the end of the tape to the green at the centre of the mat line.
- Walk forward from the mat to the jack allowing the tape to unwind as you do so.
- Ensure the tape is straight and tight and check that the jack is more than 23 metres from the mat line.
- If any portion of the Jack is less than 23 metres then return the jack to the mat end unless it is the second time the jack has been incorrectly delivered in that end in which case the jack should be placed with the nearest point of the jack to the mat line being 2 metres from the front ditch.
- If it is the correct length, inform the players
- Quickly rewind the tape as you leave the green.

EXERCISE 11
Challenged jack length



EXERCISE 10
Long string measure from
jack in the ditch to bowls on
the rink



EXERCISES 12 and 13**Measure the length of a delivered or rebounded bowl or a rebounded jack**

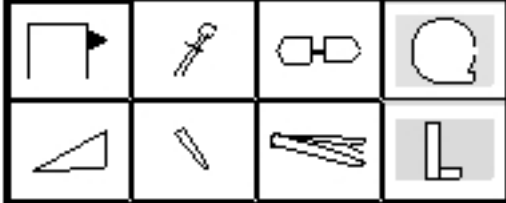
Law 17.1 requires that a delivered bowl must come to rest within the boundaries of the rink and not less than 14 metres from the mat line to be a properly delivered bowl.

Law 19.1 requires that a jack that has been moved as a result of play and comes to rest within the boundaries of the rink must be at least 20 metres in a straight line from the mat line.

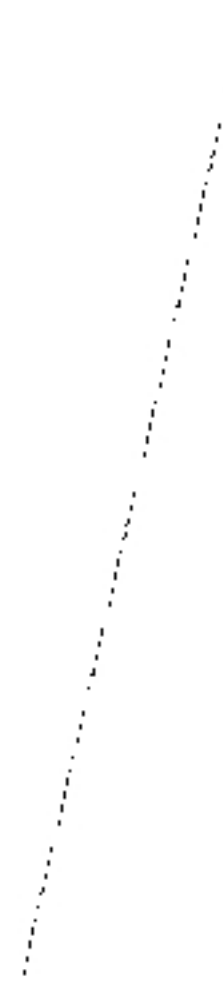
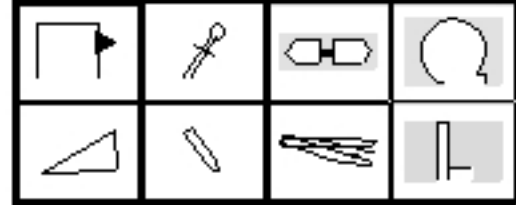
Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Ensure the jack or bowl is within the boundaries of the rink.
- Have the end of the long tape held by the marker, another umpire or a player at the centre of the mat line with the zero at the mat line. Alternately, spike the end of the tape to the green at the centre of the mat line. **DO NOT CENTRE** the jack or bowl.
- Walk forward from the mat to the jack or bowl allowing the tape to unwind as you do so.
- Ensuring the tape is straight and tight and measure the length of the jack or bowl. The measure is made to the edge of the jack or bowl nearest to the mat line, i.e. the **WHOLE** of the jack or bowl must be past the minimum distance to be legal.
- If the jack is less than 20 metres, the jack should be returned and the end should be declared dead.
- If the bowl is less than 14 metres, the bowl should be declared dead and removed.
- If they are the correct length, inform the players.
- Quickly rewind the tape as you leave the green.

EXERCISE 12
Measure a short bowl



EXERCISE 13
Measure a rebounded jack



EXERCISE 14**Jack or bowl in the ditch on the boundary line**

A Jack or Bowl has entered the ditch and a decision is required as to whether it is still live.

To carry out this exercise, follow the procedure described in Exercise 5
Alternative methods are described for using a Boundary Scope, Mirrors and Set Squares.

Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Run a long string down the green as described in Exercise 5.
- If you cannot determine the result by looking down from above the object then it will be necessary to use a Set Square.
- Place a Set Square against the jack or bowl ensuring it is level.
- Determine if the jack or bowl is live using the square and the line and inform the players of your decision.

EXERCISE 15**Obscured jack or bowl on boundary line**

Jack and bowls are near the boundary line and because of other obstructions it is not possible to determine visually if they are live.

To carry out this exercise, follow the procedure described in Exercise 5
Alternative methods are described for using a Boundary Scope, Mirrors and Set Squares.

Procedure:

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Run a long string down the green as described in Exercise 5.
- If you cannot determine the result by looking down from above the object then it will be necessary to use a Set Square.
- It is permissible to remove an obstructing bowl by using enough wedges to ensure that the bowl can be returned to its original position. This action is the last resort and you must inform the players of your actions.
- Place a Set Square against the jack or bowl ensuring it is level.
- Determine if the jack or bowl is live using the square and the line and inform the players of your decision.
- If needed you can replace any bowls you have removed.

EXERCISE 16**Multi-bowl measure (not illustrated)**

Measure between 4 or more bowls to ascertain shot or shots.

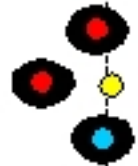
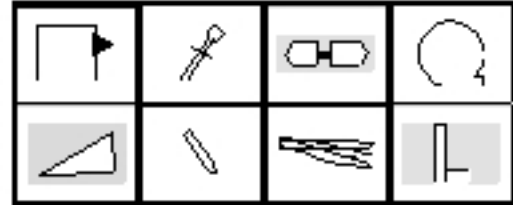
To carry out this exercise follow the procedure described in Exercise 1 or Exercise 6.
The procedure below effectively divides procedure into 2 or more measures. Ensure that you have worked out what you are going to do before you start.

Procedure:

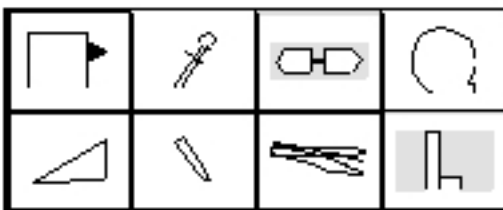
- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Ascertain from players which bowls are to be measured and ensure you know which sides bowls are which.
- Determine which of side A bowl/s is nearest to the jack.
- Set the measure using this nearest bowl.
- Measure this against the side B bowl or bowls, This will determine which bowl/s is shot. Remove shot bowl/s.
- Recheck the measure against the first/reference bowl before indicating shot/s.
- If necessary reset the measure against the other bowl of side A
- Repeat the measure against the other bowls of side B to determine any other shots.



EXERCISE 15
Obscured jack on boundary
line



EXERCISE 14
Jack in ditch on boundary
line



Alternative equipment used for completing exercises.

Boundary Scope.

A boundary scope is like a rifle sight mounted on a stand that is placed behind the boundary peg. It can be operated by one person and is quick and accurate.

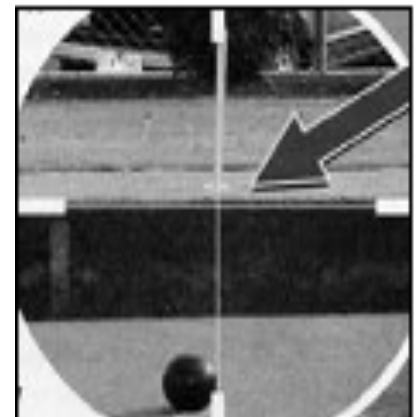
This equipment is suitable for determining whether a bowl or jack is "in" or "out" of bounds. The bowl or jack may be on the green or in the ditch,



Procedure for Exercise 5 – Jack or Bowl on the Green

Assuming the decision to be made for a bowl from Rink 2 close to the boundary between rinks 2 & 3.

- Ensure you follow the General Procedure for conducting a measure and the tips for umpires and markers.
- Set up the boundary scope at the end rink, furthest from the jack or bowl.
- Place the boundary scope immediately behind the boundary peg between rinks 2 & 3 and pointing to the boundary peg at the other end of the rink.
- Kneel so that your eyes are about 75mm behind the scope. It is a rifle sight – you will see nothing if your eye is too close.
- Adjust the level of the boundary scope until the horizontal cross hair is parallel to the top of the bank at the other end of the rink. This ensures that the vertical hair is perpendicular.
- Using both hands, adjust the scope right or left until the vertical hair comes into line with the centre of the boundary peg.
- Aim at the centre of the base of the boundary peg.
- Make the decision as to whether the bowl or jack is in or out of bounds.



Mirrors and squares are used together. There are many and varied types of both but all have the same general principles.

Procedure for Exercises 5, 9, 14 & 15

Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers

- Take the equipment to the end of the rink nearest to the object to be examined and find out which rink is in play.
- Ensure that both boundary pegs are upright.
- Place the square against the object to be checked, making sure that the blade is just touching the object, and is on the rink of play.
- Ensure the blade is upright by checking the level, and spike the square down if necessary.
- Return to the mirror end and set it in front of the peg with the centre line of the mirror inline with the centre of the peg.
- Look into the mirror and line up the centre line of the mirror and the edge of the square with the centre of the boundary peg at the other end of the rink.



Procedure for Exercise 14

Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers

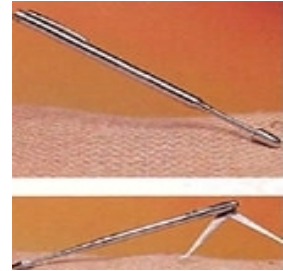
- Make sure that the rink boundary marker positioned on the bank is in a vertical position.
- With the blade of the set square extending horizontally from the handle and the outer edge of the blade facing towards the jack or bowl, place the set square flat on the green in the rink on which the jack or bowl was delivered, with the handle on the surface of the green and the blade overhanging the edge of the ditch.
- Keeping the back edge of the handle parallel with the edge of the ditch, slide the set square across the surface of the green towards the boundary marker until the corner of the blade at the juncture of its end and outer edge comes into contact with the centre of the marker.
- Holding the set square firmly in position, look vertically down the outer edge of the blade.
- If no part of the jack or bowl is obscured by the blade, then the jack or bowl is beyond the boundary of the rink so should, therefore, be declared dead. If any part of the jack or bowl is obscured by the blade, then the jack or bowl is within the boundary of the rink so should, therefore, be declared live.



Telescopic Measure

Procedure for Exercise 1

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Extend the measure until it is just short of the distance from bowl to jack
- Without moving the bowl, hold the end of the measure without the vernier screw adjustment against the bowl.
- Make the fine adjustment with the vernier screw end until bare contact is made with both jack and bowl.
- Without disturbing the set of the equipment, move to the other owl(s) and check.
- Return to first bowl to recheck your measurement before indicating shot bowl.



Long Tape

Tapes used for this measure should have a base that can be pegged to the green, a locking device to clamp the tape firm and a screw adjuster at the end of the tape.

Procedure for Exercises 8 & 10

- Ensure you follow the General Procedures for Conducting a Measure and the Tips for Umpires and Markers
- Secure any leaning bowls.
- Place the tape base so that it is just touching bowl.
- Looking from behind the bowl and the tape, ensure that the tape is pointing in a straight line from the bowl to the jack to be measured and spike the tape to the green.
- Extend the tape until the screw adjuster is just short of the jack and lock the tape at this distance.
- Use the screw adjuster until bare contact is made with the jack.
- Check to see that the tape base is still in contact with the bowl.
- Without disturbing the set of the unit, carefully remove the tape from the bowl and reposition it against the second bowl to be measured so that it points directly to the jack.
- Always return to the first bowl to recheck your measurements.

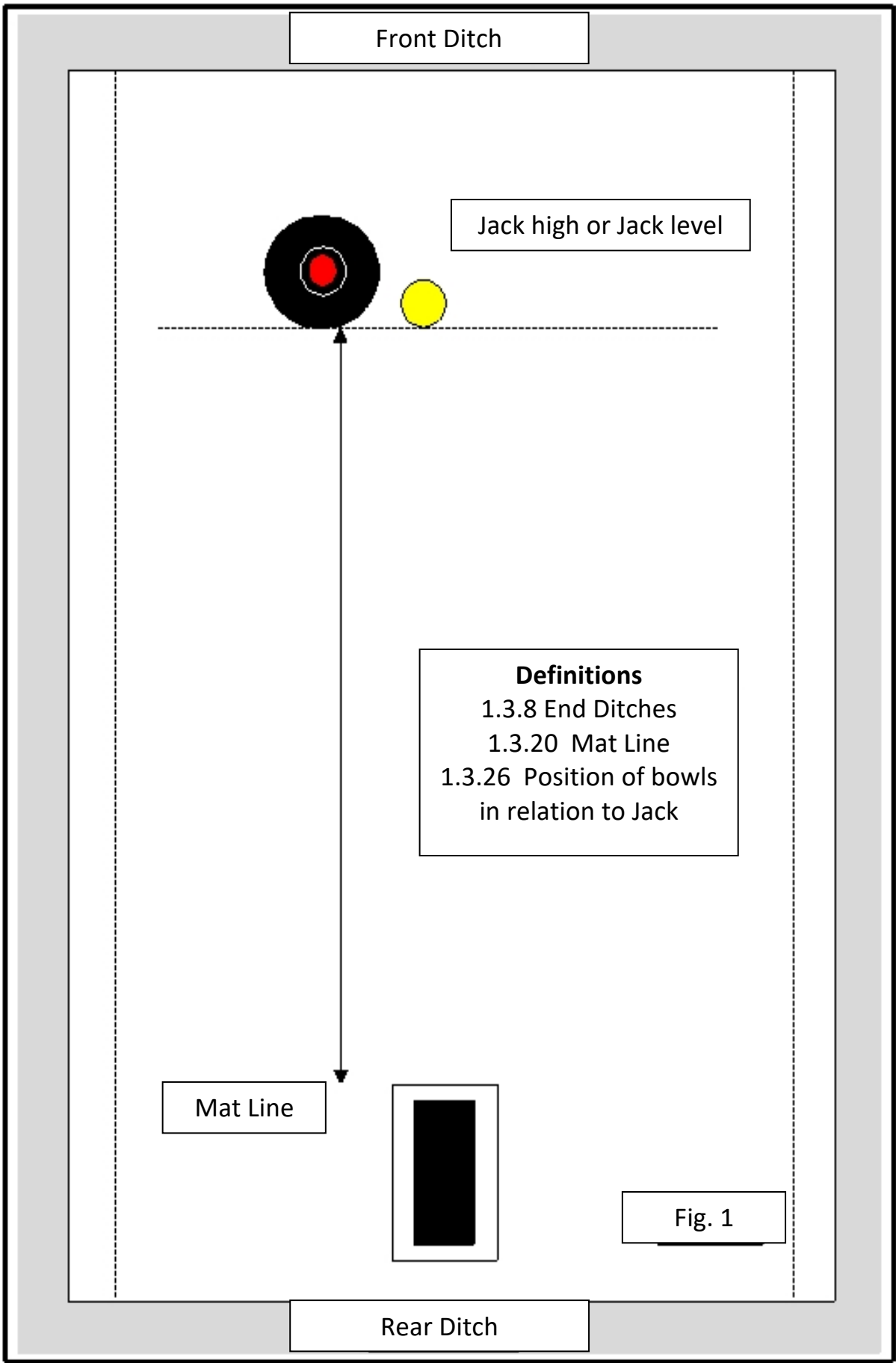




FIGURES

and

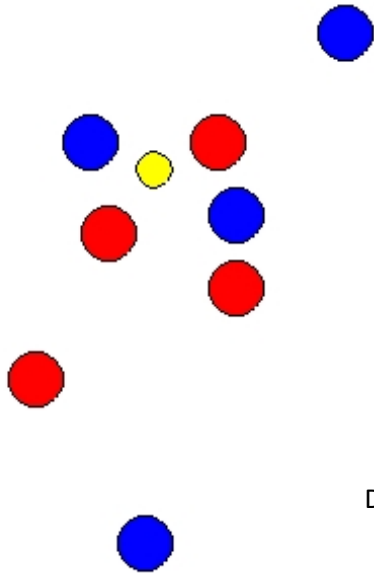
DIAGRAMS



Markers Positioning on the Rink

Front Ditch

Fig. 2

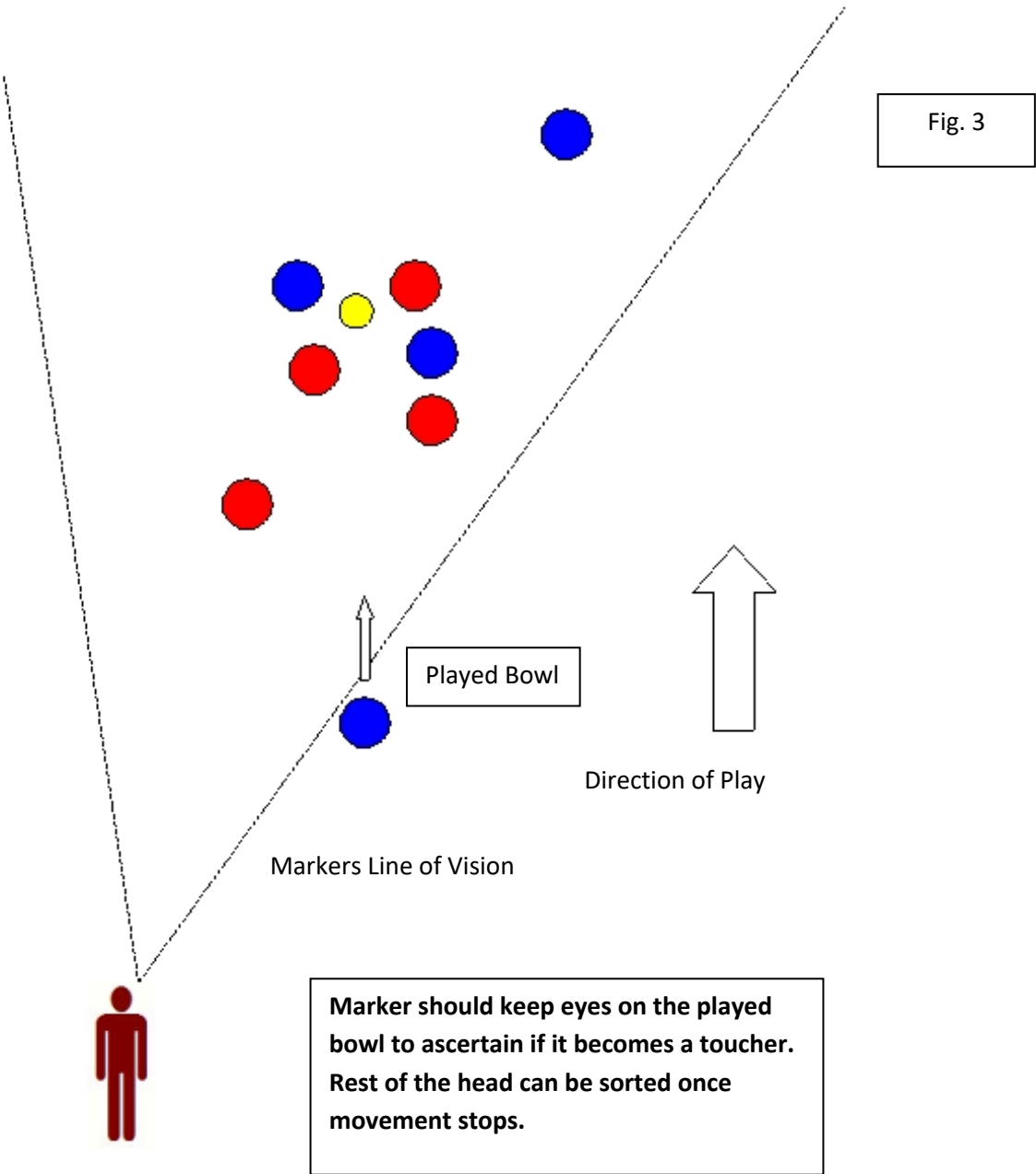


Direction of Play

Markers Normal Position
Stand approx. 2 metres back & 1 metre to the side of the Jack.

Markers Position when bowl is Fired

Front Ditch

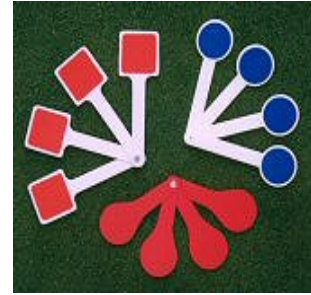


Important.
Marker should quickly move up the green as soon as bowl is played in order not to be in the way of displaced bowls and/or jack and to get full view of disturbance.

Shot Indicators

Use of Shot Indicators (Lollipops)

1. When lollipops are required to be used by a Marker during a game, the Marker should carry 2 sets which should reflect the colours on the bowls stickers.
2. Lollipops should not be displayed when a player is on the mat and about to bowl. Normal accepted practice is for shots to be indicated at the completion of an end, if a player requests it or if the number of shots held changes during an end.



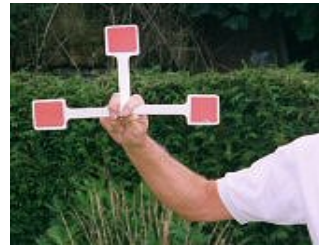
3. Lollipops should be held at eye level or just above with the arm bent at 45 degrees – see illustrations.
4. Lollipops in a set which are surplus to the number of shots to be displayed should be tucked behind those displayed and NOT visible to the players or spectators.
5. Lollipops should first be held so the players can see the number of shots and then turned at right angles so any spectators can see and keep in touch with the game.
6. If a players request the markers opinion as to who is holding shot, and the marker believes it to be a measure, then lollipops should not be used to indicate a measure, but the normal accepted action to indicate a measure should be used.
7. Important – The marker only gives an opinion as to shots held or not. Shots are decided by the players and/or the umpire - NOT by the marker.



Indicating 1 shot.



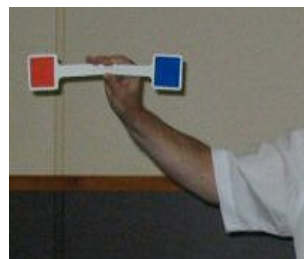
Indicating 2 shots



Indicating 3 shots



Indicating 4 shots



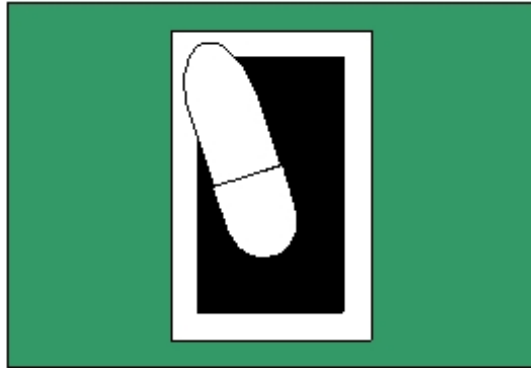
Indicating a Tied End

Fig. 4

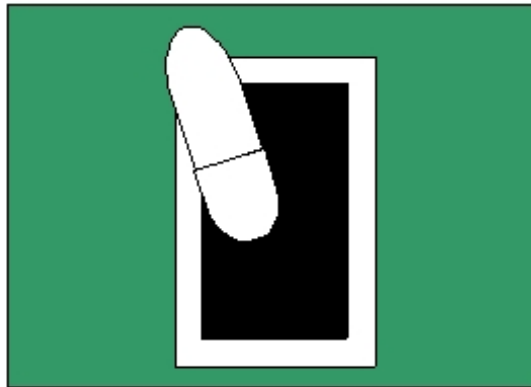
Law 7 Position on the mat
Law 8 Foot Faulting

Fig 5

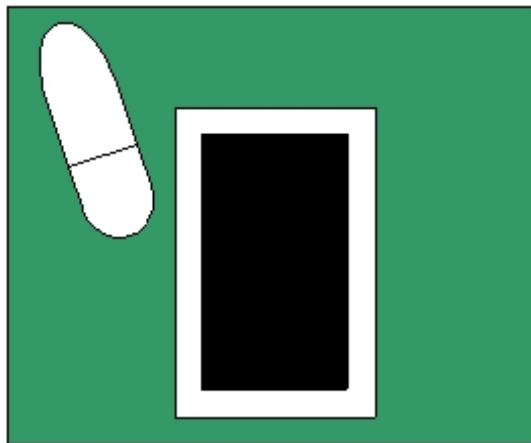
Legal

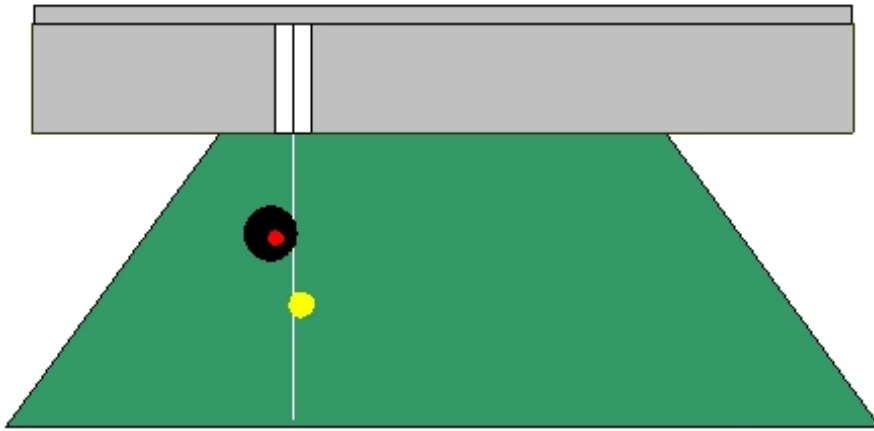


Legal



Illegal



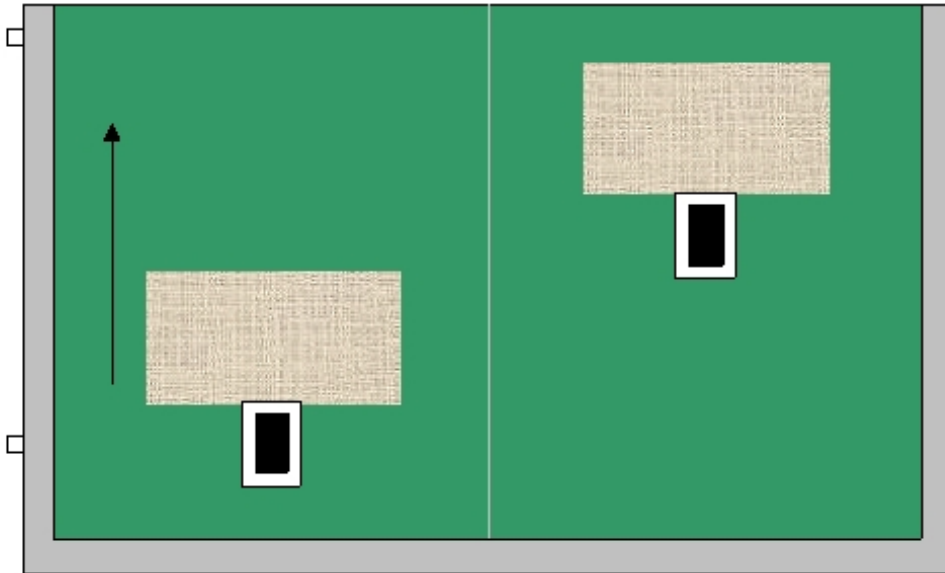


Definition
Law C19 Line Jack or Bowl

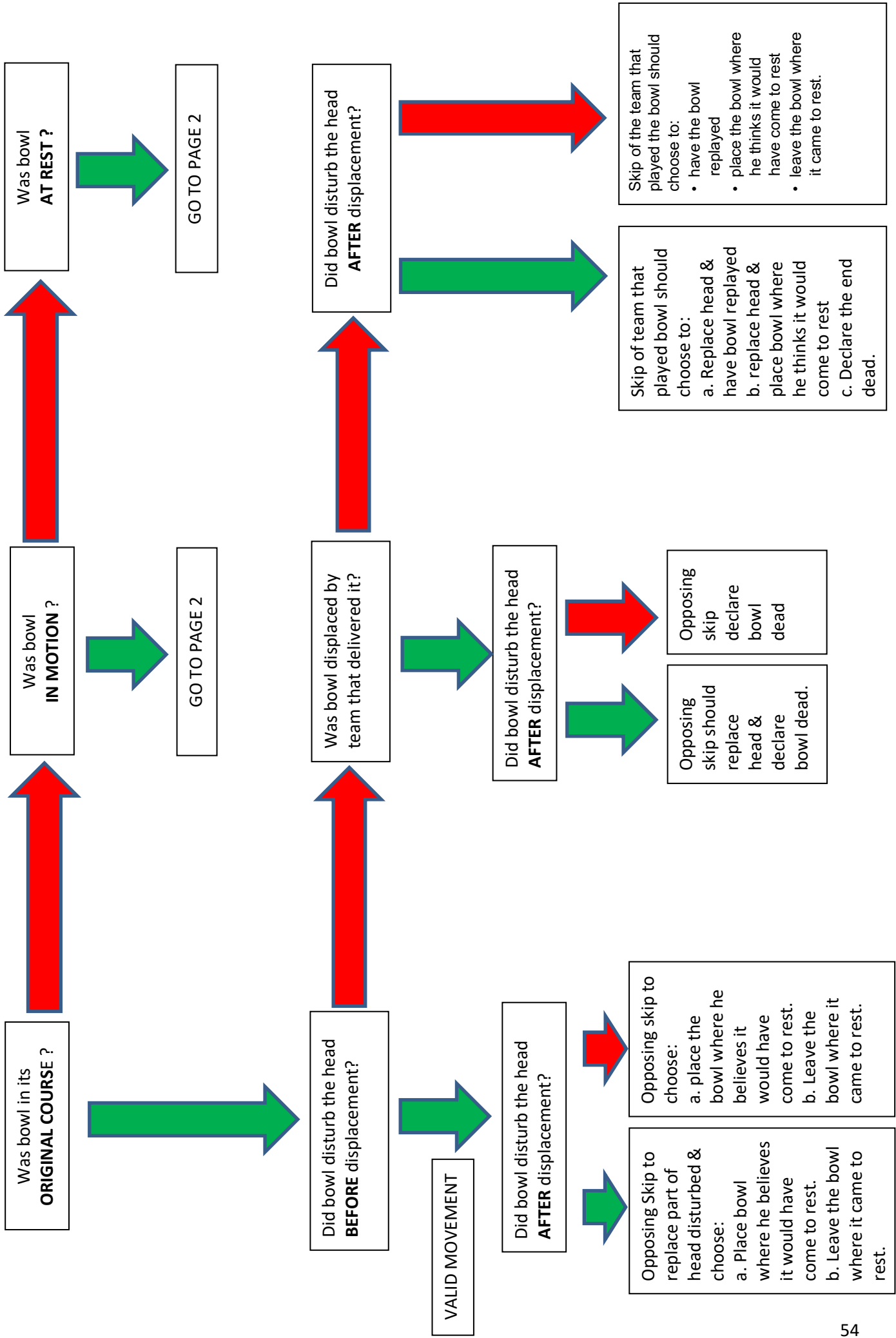
Fig. 6.

Definition
Law 6.1.5. Groundsheets

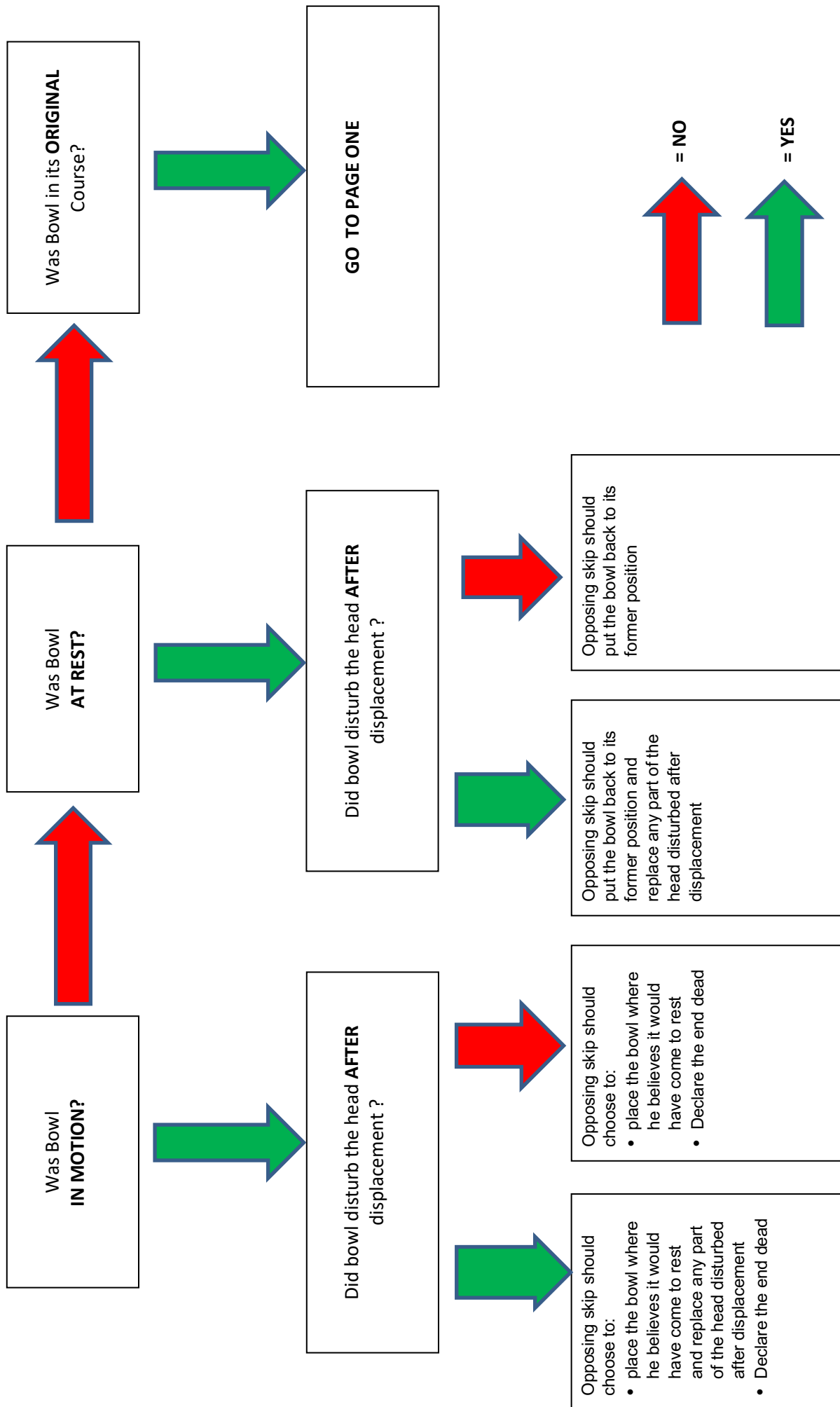
Fig. 7.



Bowl displacement by a Player – Page 1



Bowl displacement by a Player – Page 2



NOTES.

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