

SUPPLEMENTARY COURSE MATERIAL

SMS Qualification Training Course



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Additional handouts:

The Saddle & Common Faults

Taking Templates

Condition Scoring

Observing the Horse in Movement

Movement and Muscular Development

Staying Safe On The Course

PLEASE ENSURE YOU:

- Do not park in the Therapy centre car park
- Take note and act on all of the fire exits, safety notices and instructions.
- Conduct yourself in an orderly fashion when moving around the college grounds.
- Beware of vehicles and horses when moving around the college grounds.
- You MUST follow the guidance and instructions given to you by the course and session leaders and horse handlers.
- Keep an eye out for each other.
- Keep bags out of aisles in the lecture room to assist with a quick evacuation if necessary.
- TURN OFF your MOBILE PHONES during Lectures and when in the ARENA OR STABLES – some of the horses may not be comfortable with ‘sudden ringing’ of the phone.
- Be very careful working around the horses we use.
 - All stay on the same side of the horse.
 - Avoid crowding horses.
 - Leave pats, rewards, etc to the horse handler.
 - Wear strong footwear with no high heels and flap free clothing for sessions around horses.

15 Point Recommended Procedure for Saddle Fitting

1. OBTAIN AS MANY RELEVANT DETAILS AS YOU CAN BEFORE YOUR VISIT.

- Get name and all relevant contact details.
- Address of yard and phone no. if different to above, and the post code.
- Directions.
- Reason for visit. To check own or supply another saddle?
- If supply, for what discipline
- New, second hand or synthetic
- Price range
- Colour preference
- Approximate size
- Approximate fit
- Height, breed type, age condition and fitness of horse.
- Height, weight & sex of rider.
- Adult or child.
- Are suitable facilities available for you to fit a saddle?
- Are they aware of your charges?

2. AT THE YARD

You will have filled in your fitting form with details taken from the initial enquiry. Continue to use the form for the rest of your fitting. *You can have an enquiry template on line where they fill in all the above details, which you can correct if necessary and attach to your fitting form.*

Introduce yourself to the client and any advisors present. Try to appear confident and competent, but avoid appearing to be arrogant.

3. INTRODUCE YOURSELF TO THE HORSE

Take the time for him to accept and be comfortable with you. Ask if he kicks, bites or treads on feet. Watch out for any signs of sickness or skin infections, such as ringworm or a runny nose. Politely refuse to continue until the horse has been cleared by a veterinary surgeon if you are in doubt. Ask the client to remove rugs and bandages and watch the horse and the handler for their attitude to each other.

4. STAND THE HORSE UP SQUARE

Assess his condition (refer to the lecture on this) and note anything that may affect the fit. Note his age, and the work that he has been doing to date. Take his history and note everything of relevance. This will include the length of your client's ownership of the horse, what he has been doing, what they are wanting to do with him. Also ailments and injuries, both old and recent as these can affect his way of going, and possible changes to his condition. *Ask about client/ rider injuries as well. Most riders over a certain age carry old injuries and these can affect the way the saddle will perform.* Tell your client what you are doing and why.

5. ASSESS HIS CONFORMATION AND THE CONDITION OF HIS BACK

Note anything relevant.

6. WATCH HIM MOVE

Have him walked away, towards and past you. Repeat at the trot. Note any un-level movement, swing or roll in the gait and uneven lift to the quarters. Note if the tail sits to one side. If you doubt the soundness of the horse and the wisdom of fitting a saddle to the horse as presented, refer your client to a veterinary surgeon for their opinion before continuing.

7. AFTER ASSESSING THE HORSE

If you feel that the horse could change shape a lot in the near future (such as a young horse just backed), decide whether you can make allowances for this and still achieve a satisfactory fit. Consider an adjustable saddle. Inform the client of potential problems that could arise and discuss with them the best course of action to take. Make a note that you have said this.

In these cases, where considerable changes are expected, suggest regular checks, perhaps every 6-8 weeks until the shape is more established.

8. SELECT ANY SADDLES THAT YOU THINK SUITABLE.

9. TRY THE SADDLES ON THE HORSE

Remember the main points to check.

1. Horse conformation and skeletal structure.
2. Rider physique and requirements.
3. Fit of tree, width and shape.
4. Saddle length.
5. Saddle design.
6. Panel contact.
7. Balance and stability of saddle.
8. Clearance of spine and withers.
9. Position of girth straps in relation to saddle.

10. TRYING THE SADDLES

If using your client's own stirrup leathers and girth, first check these for safety and, with the leathers, for even length. *If the girth is unsuitable for this horse and will compromise the fit of the saddle, explain why this is so and use a girth of your own.*

Use the customer's own saddle cloth if it is suitable. Thick pads could alter the fit and performance of the saddle so try not to use such pads if possible, *but if the rider insists on always using such pads, then these must be used during the fitting process.* For safety, do NOT try the saddle without a suitable cloth or pad.

Check that girthing up has not unduly tipped the saddle forward and that there is still sufficient clearance through the saddle, especially at the front.

11. GETTING THE RIDER MOUNTED

In a safe, preferably enclosed arena, get your client on to the horse, ideally using a mounting block. Check the size and fit for the rider, and positioning of the legs and seat. Check that initially they find it comfortable.

12. RIDING IN THE SADDLE

Before allowing the rider to move off, check the girth, and that there is still sufficient clearance right through the saddle.

Have them try the saddle on both reins and at all the paces that they are comfortable with. Allow them to jump some fences if they intend to use it for this.

Ask them to stop if they do not like a saddle.

Check that the saddle performs as you would wish and note any rider faults that might affect the fit-tactfully! A short film or a photo, with the client's permission of course, can be very helpful with this.

13. DISCUSS SUITABILITY WITH THE CLIENT

See how they felt about the saddles and inform them of any adjustments or alterations that may be needed, and the additional costs involved, if any.

14. CLOSE YOUR SALE

15. COMPLETE THE FITTING FORM

Make sure that you have taken templates (tracings) as per the Society's recommendations, and the girth measurement. You may wish to keep these in your own file and not give these to your client as some clients are using this as a guide to buying saddles from the internet. Be sure that anything of importance that you have discussed has been noted. Get your client to read the form, check that they have understood it and agree that it is a true record of the fitting. Ask them to sign it. Give a copy to the client (if that is your normal practice) and file one in your records for future reference.

Give them, or make sure that they are aware of the note 'Thank you for engaging me to fit your saddle'.... If you have to make adjustments to achieve a good fit, make sure that the saddle is ridden in again *and that the client is satisfied* before the transaction is completed.

Make your client aware of your policy on follow up visits and after sales service.

Europe only, If the fitting has taken place anywhere apart from your business premises, make sure that you issue the relevant form with regard to the 'off premises' regulations. *Other countries may have their own laws on this, which you should be aware of and comply with.*

FITTING COMPLETE

In your assessment, you may be asked to describe some information that you require before attending a saddle fitting, what you would be looking for when first trying the saddle, what you would expect from the horse's way of going in a well-fitted saddle or when you would think a saddle unsuitable for the rider.

You will be asked about alterations that you think necessary, and possibly alterations that you would advise for a theoretical problem. These alterations might be to the saddle that you have fitted, or that you would wish included in a saddle that you are having made for the client.

Initial Approach, Customer Care and Charges

The information you require before making a visit, what your customer needs to know, how to keep records, charges and dealing with customer problems

Initial approach

- Name
- Address
- Address of yard if different
- Phone numbers
- Email/*contacts*
- Directions – is SatNav accurate to the premises?
- Details of the rider.
 - Height, weight, sex and adult or junior, level of experience.
- Details of the horse.
 - Height, age, breed type, fitness level.
- Type of saddle
- Money available
- New, second hand or synthetic
- Colour

Are you required to supply a saddle, or check the fit of their existing saddle?

If checking a fit, when was it fitted and by whom- watch out for contravening the code of conduct, all be it unwittingly.

Are there suitable facilities available?

Tell the client your charges and make sure they agree to these- don't forget to include your travelling!

The fitting

Take out to the call all suitable saddles. Remember, the customer's description is not always accurate, and others in the yard may show an interest.

Don't suggest or try on any saddle until you have carefully assessed the horse (and the rider).

Try to stop the customer becoming too set on one saddle.

Point out special features of each saddle *as you try them on*, such as type of knee roll, leathers and foams used, adjustable trees etc.

Explain the difference in the prices and the reasons for this.

Records

- Use the Society form or your own form *to record all details, findings, advice given and measurements*, and fill it in completely.
- Get the customer to read and sign it.
- It is for your protection should troubles arise later and *it is* a reminder for you as to what you saw, said and did at the original fitting.
- Remember to take templates (Tracings) and girth measurements, *(the total circumference of the girth area in centimetres.) **
- Note any changes that you anticipate.
- If the fit may no longer be suitable in a short space of time, note this.
- If regular checks of, say, 2 to 3 months are needed, note it **with an approximate date** by which the saddle must be checked.

- Complete the 'off premises' Notice of the Right to Cancel' or your country's relevant paperwork and give a copy to the customer if the fitting is not carried out on your premises.
- Keep all of your records filed and up to date.
- *. *You may wish to keep the horse's templates for your own records without giving a copy of these to the customer, as some try to buy a saddle from the internet by using your templates. Apart from you losing a potential sale, you may be considered responsible by the client if the saddle that they buy in this way does not fit.*

Charges

Types of call out

- To supply a new saddle
- To supply a second hand saddle
- Follow up visit for a new saddle.
- Fit customer's existing saddle to another horse.
- *Regular checks to a horses saddle.*
- Problem with a saddle not supplied by you. Remember the code of conduct on this matter.

Free fitting can lead to pressure on you to supply a saddle where the fit is less than perfect, rather than waste a whole afternoon's work.

Part, or all of the fitting fee may be waived **if you wish**, if a suitable fit is found and a sale is made. *Be consistent in this.*

Don't forget your travelling costs, which should be charged *whether you make a sale or not.*

Second hand and synthetic saddles generally have a smaller profit margin, so be sure to charge correctly to fit these.

Remember, you will be professionally qualified people, and should charge as such

When you sell a new saddle, you would expect to return and check the fit after a reasonably short period of time, usually about 12 weeks. Tell the customer this when you sell them the saddle and inform them whether you will charge a call out fee, and/or travelling for this. Also, if the saddle needs adjustment, whether they will have to pay for this. It is sensible to put a month and year by when you expect the check to be carried out in your customer's notes. If you only charge travelling for this first visit, limit this to one year maximum from the original fitting.

Do not offer 'first flock free' without checking the fit of the saddle. Unnecessary flocking can spoil what was a good fit.

If the flock is adjusted, the fit **MUST** be checked, including seeing the saddle ridden in. Failure to do this can lead to considerable problems. Also, the horse may have changed shape, and unless you check the templates and girth measurements, you would not know.

Dealing with problems

You will have done your best to achieve a good fit, but no one gets it right all the time. Tell your customer to contact you if they have any problems or if they are not happy. Suggest a 12-week check on any saddle that you sell, as this will give you the opportunity to spot any problems that are arising.

If you have got it wrong, *try to correct this*, either by alteration or possibly replacing the saddle with *one that fits better*. This will be cheaper and better for your reputation than a court case.

Watch your attitude with customers at all times. Be confident and competent, but avoid being arrogant. Many of the problems that we hear of come down to the attitude of the saddle fitter, and if you can keep pleasant and calm, (not always easy) it is much easier to appease the customer and sort the problem out.

If you do receive a complaint:

- Try to remain calm and do not become aggressive.
- Find your notes of the fitting and see when it was done, how long it has take them to decide that they have a problem, whether advice that you gave at that time has been followed and if you had anticipated any problems at the time of the fitting.
- Go and see the client and the horse as soon as possible.
- Is it the same horse and rider?
- Are they in the same yard and doing the same type of work?
- Has the horse changed shape?
- Check the templates and girth measurement. Check the fit of the saddle, stationary and, if safe to do so, ridden.
- Is there a problem and, if so, is it the horse changing shape, or have you made an error?
- If it is the latter, see what you can do to appease your client. If the former, tactfully point out why the problem has arisen (your notes will be invaluable here) and suggest the best course of action to take.
- Try to keep the situation calm and avoid arguments if at all possible.
- If this is not successful and an official complaint is made, speak to the Society for guidance on how to proceed. Remember that we have access to an excellent legal help line through the Society.
- Do remember and adhere to the Society's code of conduct. There is a copy of this in your hand outs.

Questions that you may be asked about this session could be: - What information do you need from your client and what information does the client need from you before your visit? what facilities will you need to carry out a successful fit? what information do you need for your records? How would you act on receiving a complaint and what is essential that you do if you have adjusted the flocking in a saddle?

SUGGESTED ADVICE/CONTINUED CARE / SATISFACTION FORM

YOUR COMPANY NAME / LOGO

Thank you for engaging us to supply and fit your new saddle.

We are fully qualified and registered SMS saddle fitters and as such, you can rely on our knowledge and advice.

Every effort has been made to ensure a good fit, however please bear in mind that with all saddles, flocking will settle, and horses do change shape.

We recommend that new saddles should be checked after 6 to 12 weeks of use, but this is a guide and earlier checks and adjustment may be necessary in some cases. It is your responsibility to arrange this.

The time of the year, the age of the animal, the work being done; even a change of home or rider may considerably alter the way that the saddle fits. We suggest that it is good stable management *for you* to monitor this and to check for any signs of discomfort to your horse.

The fit of **all** saddles should be checked every 6 months.

It is your responsibility to check the leather and stitching of your saddle, especially the girth straps regularly for wear, as you should with all your tack.

Keep all leather clean and treated with a good leather dressing.

Please use the saddle only on the horse to which it was fitted, as using it on another horse can alter its shape and fit *for the original horse*, and lead to problems.

If the saddle has a changeable head plate, or flaps and panels that are bolted to the tree, it is essential that all such bolts are tightly fastened and checked regularly as they can work loose in use. If you are not sure how to do this, your saddler will be happy to show you.

We are pleased to continue to care for the fit and maintenance of your saddle. Most problems that arise can be easily corrected.

If you have any worries about the fit of your saddle, we are always willing to discuss them with you.

Customer Name.....

Signature of satisfaction xX

Date.....

Fitter Biosecurity

Dr Jane Nixon MRCVS, the Society's Veterinary Consultant, regularly updates the Society on equestrian issues, including disease outbreaks. One of the main objectives of the SMS is to promote the welfare of the horse and an important part of this is to help protect horse health.

Collective responsibility is a powerful tool in enhancing disease prevention and basic measures are necessary to safeguard the horse population. We therefore urge all members to follow these guidelines as a day to day procedure, irrespective of any additional guidelines in respect of human pandemic.

Saddle and Bridle Fitters' Biosecurity - Essential Precautions

When visiting a yard and before moving onto the next yard or returning to your own horse:-

Check list

1. Make prior contact by telephone or text with client / carer and check:

- Has the horse been vaccinated?
- Are all the horses on the yard healthy?
- Has any horse or 'in-contact' (an individual which has been in close association with another) been away from the yard within the prior 28 days and if so has it/they mixed with strange horses and thereby possibly been exposed to infection.

2. Check no outbreaks of disease in your vicinity

3. Your own presentation

- Maintain a clean car with no detritus on wheels, footwell, etc
- Clean hands
- Use personal protective clothing
- Wear waterproof footwear capable of being disinfected
- Clean/disinfected equipment
 - used on previous horse
 - that will physically come into contact with horse being attended

4. Review on arrival

- Check no signs of illness that day in horse or 'in-contacts' ie:
 - Eaten up
 - Bright
 - No nasal or ocular discharge
 - No cough
 - No diarrhoea
 - No skin lesions: please note covering up any skin lesions with a saddle cloth and putting saddle/girth over the top IS NEGLIGENT PROFESSIONAL BEHAVIOUR and still very likely to spread disease.

5. After examination

- Keep a plastic bin liner in your vehicle in case you come across an infectious disease, so that you can place soiled items into the bag to be cleansed at home
- Clean car with no detritus on wheels, foot well etc
- Clean hands
- Clean/disinfect foot wear
- Clean/disinfect equipment

***If your clients have any questions you can direct them to the BHS web site for advice:
<https://www.bhs.org.uk/advice-and-information/horse-health-and-sickness>***

Principles of a Good Fit and How to Achieve this

The basis for both manufacture and fit of the saddle is the tree. Usually made from laminated wood reinforced with steel or from polymer resins, they will dictate the finished shape and fit of the saddle. Please refer to the lecture and notes on tree fitting and design.

The width fitting of the tree must be correct. Too narrow and the saddle will pinch, restrict movement and put too much pressure at the back of the saddle and bridge. It will put the rider's weight too far back causing them either to ride behind the movement or to tip forward in an effort to keep their balance.

Too wide causes as many problems. All the pressure will come onto the front third of the tree, it will sit too close to the wither or be over-flocked to achieve clearance. There will be considerable pressure under the arch/side rail junction and the saddle will be unstable, rocking from side to side or sitting over to one side. The back of the saddle will lift and bounce and not be in even contact with the horse. You will get at least as much damage to the muscles of the back from too wide a saddle as from one that is too narrow.

The back of the saddle **tree** must be the correct length for the horse, ideally not extending beyond T18. The rider must have sufficient room to sit in comfort, whilst still feeling secure.

If you try to fit a 'flat' seated saddle to a horse with high withers and a dipped back, the saddle will bridge. Even if you fill the centre of the panel with flock, the tree shape will exert pressures front and back causing four-point pressure.

If you try to fit a deep-seated saddle to a flat backed horse, the saddle will tend to tip forward and you will need so much panel and flock to keep the saddle in balance that the rider will feel 'above' the horse, rather than sitting 'into' it. There will also be excessive pressure at the front of the saddle and the centre of the 'dip'.

Saddle manufacturers can help by the way they web up the tree and shape the cantle to achieve a flatter seat on a deep tree or a deeper one on a flat tree.

If a saddle with an adjustable head is used, watch for the effect on the fit and balance of the saddle when the head is altered.

The positioning of the girth straps can influence where the saddle will sit on the horse. When doing your initial assessment, take note of the position of the girth groove, and note any tendency for saddles to move forward or back in use. The straps should give an even, balanced fastening when the saddle is girthed up.

The panel should have a large bearing area right through - within reason. If the panel is much wider than the tree it will just fold up at the sides as it is unsupported. *However, the broader the **supported** panel is,* the easier it is to achieve and maintain a good fit. If flocked, the flock should be sufficient to give clearance right through and a cushioning effect but should never be hard or lumpy, and the panel must never be over-flocked.

The centre channel or gullet should be wide enough to give clearance to the top and sides of the spinal processes. This will vary considerably from horse to horse, but an absolute minimum of two inches at the back of the panel is desirable, and a maximum of four inches may be desirable for some but will cause problems for others. The gullet is usually wider at the head of the saddle than at the back.

Panels should be of an even size and shape and flocked evenly to start with. They should be sewn in straight and level at the front and back. The saddle should be checked before fitting *to be sure that it is straight and square in its construction.*

Take time and trouble when assessing the horse. (refer to the lectures on this subject), but don't try to do a five-stage vetting. You need to know only if there is any discomfort or any conformation or movement abnormalities that could affect the fit of the saddle. You will not be thanked for pointing out faults that the horse may have which in no way affect the fitting of a saddle. You are not a veterinary surgeon!

When fitting, always take a front template/tracing before trying saddles on for your information, as just using the eye can be deceiving. Do not take all your templates for your records at this point as some horses can change shape and width as they are ridden. You may wish to template 'before' and 'after'.

On trying the saddle:

Note: The Candidate Assessment Guide specifies consideration of horse and rider shapes as a precursor to this stage of fitting – See Unit 404 Learner Outcome 5

1. Horse conformation and skeletal structure

Assess the horse to find and mention anything within its conformation or skeletal structure that should be taken into consideration or could affect the fit of the saddle on this horse. Some examples would be short back, high withers, uneven shoulders. There are many other factors to consider.

2. Rider physique and requirements.

Factors to consider. Rider height & leg length, weight, approximate age, apparent fitness level, injuries or ailments that could affect their balance and straightness when riding. Discipline for which they require a saddle, budget available, any special requirements that they have asked for.

Then with the saddle on the horse consider:

3. Fit of tree, width and shape

Shape and approximate fit for head of tree. Length of points, shape and angle of side rails, overall shape of tree, depth of seat in relation to rider requirements. A flexicurve may be used to confirm shape and width if required.

4. Saddle length

The saddle should sit so that the tree points are behind the shoulders. The tree, where the cantle joins the main body of the tree, should ideally not go beyond T18, although the panel may go a little past this point.

5. Saddle design

Your conformation assessment will have determined what shape of panel is required. Dropped, thoroughbred, K panel? Less depth? Front gussets, long, shorter or none? Standard, deep or shallow rear gussets? Full through the bearing area or slimmer?

For the rider, position of knee and thigh blocks in relation to rider shape and requirements. Flap size, length and angle.

6. Panel contact

When the saddle is sitting in the correct position and in balance there should be a smooth, even contact through its entire length.

7. Balance and stability of saddle

The saddle, when in the correct position should sit evenly front to back, side to side. It should not tip back nor forward, nor rock front to back or side to side, and it should feel stable.

8. Clearance of spine and withers

There should be sufficient clearance so that neither the top nor sides of the spine or withers will be in contact with the saddle when the horse is being ridden.

9. Position of girth straps in relation to conformation

The girth straps should line up with the girth groove when the saddle is in the correct position. Saddles that have multiple choices of strap position should have the straps as suits the horse before trying the saddle dynamically.

If you remember these points, you can run through them and be sure that you have not forgotten anything.

Once you have short listed saddles, get them girthed up and the rider mounted. Remember to check the girth. Watch, when fitting the stirrups that the angle of the stirrup bars is correct. *Too open or angled downward* and the stirrup leather may come off, too tight and there will be pressure on the horse's back from them.

Once the rider is mounted, assess the fit of the saddle for them. Does it sit them in the right place? Is the seat size correct? Are the knee rolls in the correct position for this rider? *Is there room for their legs, or are the flaps too long?* Has the horse 'dropped' his back, *tipping the rider back once the rider is on?*

If this happens, wait until the horse is ridden, as some come back 'up' under the saddle when ridden, but some do not.

Before the rider sets off to try the saddle, check that there is still sufficient clearance through the saddle and that the girth is tight enough. If this is okay, send them off and ask them to walk, trot and, if they are happy to do so, canter on both reins. You will, of course, have taken every care to be in a safe, contained environment (see notes on safety). Watch for excessive movement from the saddle, the position of the rider and the horse's attitude. Watch the horse on a straight line whilst standing behind them to look for the saddle moving over to one side. Note any rider faults that could affect the fit of the saddle.

If you are not happy with the saddle when ridden in, stop the trial immediately and try another. If all is going well, *both horse and rider seem to like the saddle and it is to be used for jumping*, get them to try it over some fences. *Before sending them off to do this, check that the girth is still tight enough and that there is still sufficient clearance.* If all still seems good after the jumping, get them to come back to a walk and come towards you in a straight line, and ride into a square halt. Check that there is still sufficient clearance and that the saddle is sitting square front and back. If not, did you notice any asymmetry or uneven action when you assessed the horse, or does the rider ride unevenly? Try other saddles and if they all go over to the same side, it must be either horse or rider, not the saddle. There are ways of stopping this, if this is the case (see lecture notes on difficult fits) *but be sure of what the problem is before trying to correct it.*

Also check that the saddle has not moved up the neck or back too far. As above, notice anything in the assessment that might cause this? Do all saddles do the same? Corrective measures in 'Difficult fits.'

Remove the saddle carefully. Whilst ideally, we would fit without using a saddle cloth, this is not advisable these days as so many horses have never been ridden in this way and you could get a rather violent reaction. Even if the horse 'behaves', he might not go as he usually does and you will get a false picture of the fitting. However, if a good but *reasonably thin* cloth is used, it is possible to see, *from the sweat or dust marks on his back if the pressure distribution is even through the saddle's length and that it has been sitting evenly both sides of the spine.*

If your customer *insists on always* using a pad of some kind, fit with it so that the end result is correct, but note this on your form.

Whilst it is not always possible to see the horse ridden in the saddle (i.e. an unbroken horse), remember that it is possible to say that a saddle does NOT fit without seeing it ridden in, but it is NOT possible to say that *it is a good fit* if the horse is not tried in the saddle. You must advise your client of this fact and note this on your form.

Remember that communication is as important to the success of a saddle fitting as the fit itself. Talk to the customer throughout the fitting, explaining what you are doing, why you are doing it and what you have found, but try not to be too rude about their horse. It is, after all, their pride and joy, no matter how much of a spavined nag it is.

If you have a difficult fit, do not be frightened to ring other qualified saddle fitters and run the problem by them. We all need help at times, and most will be only too happy to help you.

Some of the questions that you may be asked about this session could be on the essential considerations of fitting, why you should use a saddle cloth when fitting, what should you do once the rider is mounted but before you send them off to ride or what should you ask the rider to do when you send them off to try the saddle?

Fitting Saddle Trees

The saddle tree is the framework on which the saddle is made. If of the correct shape, it will help to distribute the weight of the saddle and rider over the area from the back of the scapula to the last rib, T18 and to either side of the back, leaving the spine free of pressure.

The head of the tree can be an inverted V, an inverted U (open head) or keyhole shaped. The shape required will be dictated by the shape of the *horse's* back 2", (5cm) behind the leading edge of the scapula.

In the past, the 'sloping head' was a popular style as it took the feel of the tree points away from the rider's leg, but it was not realised that the points would catch the horse's shoulders with every movement.

Backward sloping points have been tried but, as they are not supporting the panel, the saddle tends to tip forward. Most tree points at present are straight down. Some of the better trees flare the bottom of the point out a little to follow the shape of the ribs.

Beyond the head are the side rails. These come in *to form the waist or twist, the narrowest part of the seat, then fan out to make the wider area*. Side rails can be wide apart or closer together at the waist. They can also be of varying widths and angles. Ideally these will mirror the shape of the horse's back, exerting no pressure on the top or sides of the spinous processes. Of course, the panel will lift the saddle clear of this area, but if the shape, head width and width between the rails are not similar to the horse, uneven pressures will be applied to the horse's back through the panel.

The tree joins *in the centre* at the back in a curve, and the cantle is attached to this area. Cantles may be round, square or dish shaped, but this tends to be a fashion fad for the riders. It should not affect the fit of the saddle. Please take a good look at the back of the tree where the cantle joins. This is the last point of the tree that can sit on or before T18 as this is the last point of high downward pressure on to the horse. The panel may extend a little beyond this point, but not the tree.

The seat can be deep, *medium depth* or flat, mainly as the rider chooses but the underside of the tree must follow the contours of the horse's back or you will have bridging or rocking in the saddle. Flocking will not overcome this problem. The saddle will exert uneven pressures when ridden in, even if the contact feels even.

If you are having a saddle made for a particularly difficult horse, it can be helpful to get the type of tree you intend to use sent to you to try on the horse. This will also give you an opportunity to see where the girth straps / webs will need to be fitted to achieve a good fit.

Many manufacturers now offer their saddles on a choice of trees, which can really help with getting the correct fit.

Materials for saddle trees vary. The most common is the laminated wooden tree with steel reinforcement and often, springs. The springs are strips of spring steel running from just beyond the waist of the tree to the back of the seat, replacing what would have been all wood either side of the gullet. This lightens the weight of the tree and allows a little flex.

Becoming much more common are trees made from polymers and resins. Whilst the wooden trees are generally *'hand' finished*, so differences can occur *or be made to suit different shapes* in their manufacture, polymer trees are made in a mould and so are consistent in their shape & size. Whilst this is good in most cases, it is not so easy to alter or modify a tree for an odd shaped horse.

Carbon fibre trees can be good as they have some lateral flexibility in use.

Passier are still occasionally using trees made from leather, reinforced with rattan through the seat & cast steel reinforcement in the head. These make a lovely tree with some flex, but they can twist out of shape a little with an uneven horse or rider.

Adjustable trees

This has been tried with various levels of success for many years. *Nowadays there are some very good ones available, thoroughly tested and these are being demanded more and more by the clients.* There are several different kinds on the market, from polymers that can be heated up & re-set, Carbon fibre the same, and changeable head bars. With all, remember that when the head is opened or closed, the side rails must alter their profile as well, or the saddle could pivot at the waist or sit too low/ flat here.

Remember that, although you can change the width fitting, if the horse has changed drastically the tree used may no longer be the correct *shape or style*. For instance, a tree with short points, fitted to a broad, possibly fat horse may not have enough length in the points to support the panel if he slims right down & gets very fit. The saddle may well, in this case, drop onto the spine when ridden in despite the bar being the correct width.

Tree alteration

Recently there have been machines of various designs marketed that can alter tree width. Whilst this can be very useful on occasions there are limitations to their use and some problems arising from them. The SMS has a recommendation that no saddle should be altered without prior permission of the manufacturer, and that it should not be altered more than twice, the total alterations being no more than *a total of one width fitting in total*. Alterations should be marked on the near side sweat flap. Altering the saddle more than this, either in width or number of alterations will compromise the strength of the tree and the rivets.

It is not uncommon to see saddles that have been altered, where the points are not even so that, say, the near side point is set at wide whilst the off side is set at medium. If this is the case the saddle will always drop over to one side in use. Altering it to be even is extremely difficult with a satisfactory result a rarity. A new tree is usually needed to correct this.

Treeless saddles

A tree is used to distribute pressure evenly over the horse's back in the area where he is strongest (behind the shoulder to the last rib /T18 for the tree). Removing the tree means that the pressure is localised where the stirrups/ girth webs sit and under the rider's seat bones. It is also difficult, if not impossible to achieve clearance at the wither and along the spine, especially on a horse with a decent wither. The usual scenario is that initially the horse goes very well in the saddle, then not so well until he then develops a sore back. The damage is cumulative, so that, if the horse is ridden lightly and irregularly there may be few if any difficulties apparent, although we know that damage may well be occurring.

There are also saddles with a front arch of a tree and short side rails, stopping just beyond the stirrup bars and sometimes the tree continues at the cantle but with a flexible joint in the centre. These tend not to distribute the weight / pressures evenly and the saddle folds in a little at this point as with a treeless one, so we advise that these should not be used.

When I am asked my opinion of treeless saddles, *or those without a full tree* I point out that every nation, rich or poor that uses equines for riding or as pack animals, has developed a form of full tree, no matter how rudimentary. This would indicate that a full tree has been found to be necessary.

The most important thing to remember is that if the tree does not fit well, ***the saddle will never be a good fit***. Therefore, being able to see what shape of tree is in a made saddle is essential.

In the assessment, you may be asked to name the different options in head shapes and what shape of horse these may fit, the importance of the shape of side rails and centre gullet and the depth of the seat as it relates to the shape of the horse. You may also be asked about the length of the tree on the horse's back.

Checking For Faults

All new saddles should be checked for symmetry and faults on arrival with you.

Check that the tree appears to be square, that the panels are sewn in level front and back, and that the head, *welting* and back of the seat are pulled on square.

The panels should be of even width and depth *with the gussets even in length and shape, and the flocking or filling* should be free of lumps & bumps and even to the touch.

The billets should be level, at the same angle and in the same position both sides (*unless deliberately fitted one side as a balance strap*).

The saddle should be free of faults within the leather, remembering to check the back of the billets.

If the saddle has been made to specification for a customer, check that everything specified by you has been done to your satisfaction.

Second hand saddles should be checked as follows.

*Check that the tree is sound, the front arch both squeezing in **and out**, the back of the tree through the twist and the cantle plate.* Both feel and listen when checking.

Check that the saddle is straight both the tree, panel and seat / head as with a new saddle.

Check that the stirrup bars are firmly attached to the tree, *are evenly positioned*, are bent *neither outward, making the stirrup leathers too loose nor in, exerting pressure through the saddle to the horse's back* and that if they have thumb bits, these are easily moveable up and down.

Girth straps (billets) and girth webs must be checked. Billets tend to wear more on the back than the front of the straps so check here carefully. Check that the stitching of the straps is not worn nor loose. *The webs must be sound and firmly fixed.*

Check all stitching on the panel and the flaps.

Check seat and flaps for excessive wear.

Check that the panel filling is even, level and still has some resilience.

Most of all, be sure that you feel that the saddle will be safe to use.

You may be asked questions such as what might make a new saddle appear to be 'twisted', what is important about the panel in a used saddle, where might a tree be broken, how would you check for this and where will you see the most wear on girth straps.

Adjustment to the Fit of Saddles

NEW SADDLES

All new saddles should be checked for symmetry and smoothness of the flocking and that the panel is sewn in straight front and back.

Only minor adjustments should be made to new saddles. Any major adjustments such as deeper rear gussets or the addition of front gussets should be done during manufacture to your specification. Such alterations to a new saddle would be uneconomical and risk spoiling the saddle.

x

Acceptable adjustments would be:

- Addition of flocking to correct the balance of the saddle or level a saddle on an asymmetric horse. If doing this, only minor alterations should be made, and you must avoid adding too much flock, trying to make a wide saddle fit where a medium or medium wide is really not the answer. Always use good quality flock. Do not add or remove flock to such an extent that there is no cushioning effect left.



- To adjust the flocking, panels can be dropped at the front, back or completely, or you can work with the panel still in the saddle, depending on the skill and experience of the saddler and the adjustments to be made. Any stuffing slots added should be as small as possible and cut vertically, NOT horizontally.

- It is sometimes helpful to add quilting stitches to help shape a panel, such as over and around the shoulders.



- Fitting balance straps to prevent a saddle moving to one side - only to be done when you have established that all saddles move to one side and, if possible, established the reason for this.



- Point straps can be added to help prevent a saddle moving forward or backwards, but if these are fitted, it is advisable to fit a self centering, 'swinging or 'floating' back strap to help prevent 'bounce' at the back of the saddle. This back strap can also help with a very active horse which tends to 'bounce' all saddles.



- Addition of air bags. Some manufacturers do not fit air bags, so this is an acceptable alteration.

Tree alteration

Many people are aware that there are machines that can open or close a tree. The Society has discussed this and has made the following recommendations.

1. The tree should always be sent back to the saddle manufacturer for alteration. Failure to do this will invalidate the warranty.
2. **The tree should not be altered by more than one width fitting in total.**
3. The saddle should be marked in such a way as to show that it has been altered.
4. The tree should not be altered more than twice, a maximum of one width fitting overall.
5. If you intend to alter a second hand saddle, the customer should be advised of the risk of the tree breaking, and whose responsibility this will be should the worst happen.

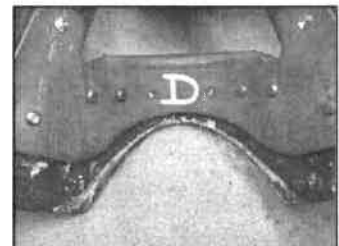


Whilst you would not want to rely on these alterations for your saddle fit, it can be useful when fitting young horses, as they are sure to change shape, but rarely by more than one width fitting. Be aware though that it is easy to alter the saddle unevenly if you do the work yourself. If one point ends up wider than the other the saddle will move to one side and this is almost impossible to correct other than by replacing the tree.

Many saddles now have changeable head plates/bars and these can be easily changed, although it is best if the saddle fitter does this. It is often necessary to adjust the flocking a little once the bar has been changed to balance the saddle and attain an even contact throughout the panel. Also, clients often fit too wide a bar in the belief that this is 'more comfortable' for the horse, but as we know, this leads to many problems.

USED SADDLES

Always check the saddle for soundness in the presence of the customer before carrying out any work. Remember to check the stirrup bars, as well as the tree, girth straps and webs.



Common work will be:

- Stripping out and replacing old, hard, lumpy flock and replacing with new, or stripping out and reflocking to alter the balance of a saddle if this cannot be achieved by adding flock.
- Sometimes, the centre channel will be too narrow for the horse, and it is possible to widen this when reflocking, provided that this does not reduce the bearing area to an unacceptable degree.
- Whilst reflocking, it is possible if necessary to alter stitch lines, such as in the head of the saddle. Altering the stitch lines can improve the fit of a saddle, but will deface the saddle and so could reduce its value.
- Adding flock to the panel. Whichever way you do this, be careful not to disturb the existing flock. Slide the wool in between the existing flock and the top (side nearest the tree) of the panel.



- Replacing flock with air bags can be done to the majority of saddles, provided the panel is wide enough. Note. The saddle must be a good fit. Air bags will not make a poor fitting saddle a good fit.
- Quilting the panel, sometimes after a reflock, can shape a saddle around a horse with difficult shoulders.
- Replacing worn girth straps. Always check the webs before doing this, and replace at least 2 straps each side, never just one.
- Fixing felt or dense foam to the tree can help to make a tree a little narrower at the front, or to give lift at the back to help balance a saddle if it tips back a little, where adding more flock would make the panel too hard.
- As with new saddles, point straps and self centering back straps can be added. If a horse has a girth groove forward of his shoulder it may be necessary on some dressage saddles to run the point straight down through the front of the panel, emerging from the underside, so that the strap does not press the bulk of the base of the panel into the horse's sides. If the strap is angled back, around the knee roll, the girth will move forward into the girth groove making the point strap curl around the roll and the saddle will be pulled forward.

Always advise the customer of the costs of any work to be undertaken before you start the work, and of any doubts you may have as to the success of the work you are doing in achieving the result that you wish.

Some questions that you may be asked are as follows: - Name two acceptable alterations to a new saddle. What problems might occur if the tree width is altered? What might need to be done after a bar is changed in an adjustable saddle? What must you do before accepting to undertake repairs to a saddle? Why do point straps sometimes need to come straight down through the knee roll of a dressage saddle?

Breed types, Conformation and General Fitting Difficulties

Trouble shooting horses with difficult conformation

Different breed types pose their own fitting difficulties. Some of these are as follows:

Small (or not so small) ponies

Often have poor shoulders and a very well sprung rib cage making them 'delta' shaped, so saddles shoot up their neck. Often over-weight.

Natives such as Highland ponies, Fells, Dales, Haflingers, Finnhorses and Icelandics. Also, Cobs

Bred to live on poor grazing and for use often as pack animals, their shape sometimes does not lend itself to a saddle. Usually very round, especially when kept in conditions far better than they need to maintain bodyweight, saddles can slide up the neck and tend to be unstable.



Arabs

Don't tell their owners this, but their problems are very similar to the natives, in that they are very round and often send the saddles up the neck. In addition, they are generally very short in the back. Add to this that they are often ridden by ladies with large bottoms, and you have quite a problem.

Thoroughbreds

Usually with high, long withers, often quite hollow behind the Scapulae. **Can** be quite narrow but **not always**. Can be steeply or flat sided. The spinous processes are often prominent. Many are now very short in the back.



Warmbloods

Many difficulties here, as this heading covers many different types. The main difficulties are: - Long, often high wither, very broad at its base. The horses are often 'uphill'. Broad spinous processes. Some are very flat in the wither and the saddle will run up the horse's neck. Usually very powerful behind the saddle.

Shoulders are often of different heights and depth which can push the saddle over to one side at the back, and there may also be asymmetry of muscle along the back.



Baroque breeds/ types

Often, these breed types (Friesian, Andalusian, Lipizzaner etc.) have a very high head carriage, often in conjunction with a short, dipped back. They are often much higher in front than behind. Backs are quite often rounded with poorly defined withers.



OTHER FITTING PROBLEMS

High withers

Long withers

Short back.

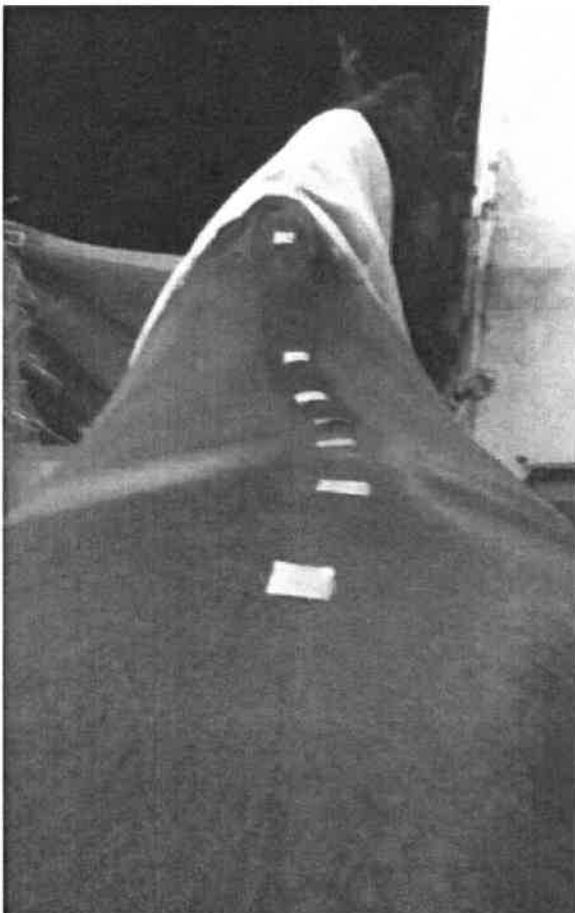


Hollows behind withers.

Prominent spinous processes/ roach back.

Broad spinous processes.

Scoliosis of the spine.



Top of scapulae pushing saddle back.

Scapulae sitting under the points of the tree.

Loaded shoulders.

Uneven shoulders, either in height or position.

Poor shoulders.

Well sprung rib cage.



Herring gutted.

No girth groove.

Forward girth groove.

Steeple back/ flat sides.

Higher in front than behind.

Higher at the back than the front.

Sway/ hollow/ dipped back.



Flat, broad back/no withers.

Saddle moving to one side.

Un-level action/stringhalt.

With all fitting difficulties, the first thing to do is to establish where the difficulty lies. Is the difficulty with the horse? Could it be the rider? How does this affect the fit? What do I have to do to overcome the problem?

Discuss the problem with your client so that they can appreciate the difficulties.

Find what type of saddle they require and tell them if this is possible, and if not, why not. For example, if the horse has a markedly dipped back, you will not be able to fit a close contact, flat seated jumping saddle. Likewise, a horse with a short back will not take an 18" forward cut, sloping head jumping saddle.

With many of the fitting difficulties, it may not be possible to get the right result at the first attempt. Your client must be made aware of this and understand that patience and deep pockets may be needed. Nor can you guarantee to get to a satisfactory conclusion with some fits, and you must discuss the possibility of this with your client. Express your willingness to try (if you feel that you have a good chance of getting it right), but make sure they understand the possibility of failure, at their cost.

If they are not happy with this, turn the job down. Either they will be dissatisfied, or you will be out of pocket.

Do not be afraid to say that you do not think you can fit the horse.

TROUBLE SHOOTING

With all difficult fits, use this method.

Assess the conformation carefully to find what is causing the difficulty.

Find the right tree.

Find best girth strap position.

What type of panel is needed?

Front gussets? Rear gussets, thinner or deeper than usual?

Flap/panel/knee-roll configuration.

Special girth needed?

Grip pad?

Breast girth?

Here are some examples.

Small ponies, animals with well sprung ribs, often poor shoulders.

Powerful behind the saddle. Usually, the saddle will run up the neck and onto the shoulders.

Choose the tree type with care and the front fit must be spot on. Shape and angle of the side rails must correspond exactly to the animal.

Try grip pads as these can work for some. Also, serge panels can help if used directly onto the pony. Fit point straps, but if this is done, a rear strap on a self centering D/ V web is necessary to stop the back of the saddle lifting. A fixed rear strap does not work, as this will pull the saddle forward, the opposite to what you want.

Consider using a crupper. Although out of fashion, they have been used for centuries without problem and are still a part of the tack for many of the Classical Riding centre's horses. They are far better for the animal than having the saddle on its shoulders, and most accept them if they are introduced gradually. Remember, every set of harness incorporates a crupper, and they seem to cope. Sometimes, you must accept the **least bad option**.

Natives

The problems are like those above. Similar action.

Arabs

Fixing in place and stability problems, treat as above.

Short backs. Look for a short, broad tree. If possible, **DO NOT** go beyond T18 **with the tree**. The panel can go a little beyond this. Have the saddle made with a wide seat and broad but short panels, but remember, once you have gone beyond the parameters of the tree, any further panel will be unsupported and so of little use. Having a larger, more forward flap can help accommodate the size of the rider.

Thoroughbreds

Usually, clearance of the withers is the major difficulty, and this can lead to the saddle tipping back. This difficulty is due to these horses having very long spinous processes, which means that the thoracic vertebrae and rib cage (which is the support frame for the saddle) start much lower down the horse's sides. A standard cut panel will rest on just skin, fascia and muscle with no skeletal support beneath it. Even if you can achieve clearance with such a panel, this will restrict and damage the muscle and prevent the horse from working properly.

Have the panels cut deeper under the points. This is now commonly done and is referred to as thoroughbred cut, K or dropped panel. The points of the tree must be long enough to support the panel and may need extending. It is also useful to have a front gusset added, as this gives you more room for flocking without overstuffing. The gussets must be longer than the tree points. Of course, the correct shape of tree is essential.

Gaining front clearance may tip the saddle back. You may need deeper rear gussets to balance the saddle and this will mean that the panel needs to be cut quite full through the centre, and the rear gussets should run into the sweat flaps to prevent bridging.

Short backs, see Arabs.

Warmbloods

The usual problem is in the shape of the back, especially at the base of the wither. The wither can be very long. This length will mean that you check the clearance at the front arch and it is fine, but 3 to 4" further back, the wither is being caught by the saddle. Be careful to check for this.

The shape of the head and side rails of the tree are completely different for these horses, needing a more open head and flatter side rails with plenty of gap between these for many. Some, especially the Dutch warmbloods, have a long and high wither, but then 'spring out' at the base of the wither and so are much wider than you would expect. This is the type of horse that needs a 'keyhole' tree. Refer to session 7 on fitting trees.

The centre channel will need to be wide enough to clear the top and sides of the spinal processes, but not so wide that the panels do not sit on the muscles of the back.

If higher in front than behind you will need deeper rear gussets and a fuller panel through the centre. Use the true drop measurement to decide the depth needed.

If the horse is asymmetric in the shoulders you may need to flock asymmetrically to keep the saddle straight and level. Make sure your client knows that you have done this, and why. It must NOT be used on any other horse unless readjusted. An alternative is to use Flair airbags or pad with adjusting shims. It may be necessary to fit a balance strap to help the saddle to stay straight.

Conformation problems

High and long withers

These have been covered with TBs and warmbloods, as have **hollows behind the withers**.

Short backs

See Arabs and TBs.

Prominent spinous processes/roach back

Centre channel will not want to be too wide, just sufficient to give clearance to the sides of the spinous processes. Cut the panel very full to allow for plenty of flocking with front gussets of at least 8" (20cm) length, 1 ½" (3.5cm) wide, and the rear gussets will need to be deeper than standard.

Top of scapula pushing saddle back

Also, loaded shoulders

Usually only a problem if wanting a forward cut saddle. VSDs and Dressage are usually OK.

If you require a jumping saddle, choose a tree with straight points, then either incorporate the knee roll into the flap and cut the panel straight. This will sit behind the shoulder whilst the flap and knee roll sits on the shoulder. There are a few companies making saddles with this style of panel. An alternative is to cut the panel as standard but flock it VERY thin over the shoulders and quilt this part. You may need point straps and swinging back straps to keep it in place. If the saddle is being pushed over to one side by the shoulders, look to adjusting the flock and consider fitting a balance strap. Grip pads or a serge panel may help.

Scapulae sitting under the points of the tree

Obviously, this is extremely uncomfortable for the horse and will often push the saddle right back. I have found the fitting of airbags to an otherwise well-fitting saddle, or a WOW saddle will allow the scapulae to slide beneath the tree without causing the horse discomfort or moving the saddle.

Uneven shoulders

This could be uneven in height or position. If one shoulder is set further back than the other the saddle will sit on one scapula and may push the saddle over to the opposite side. If they are of uneven height or depth, they might also push the saddle over to one side, or the saddle might look off centre to the rider

when, in fact, it is completely square. Watch carefully to see if the saddle moves. Advise your client to be careful to put the saddle far enough back so that the shoulder does not interfere with the fit. It may be necessary to either fit airbags or to flock unevenly to keep the saddle straight. Having seen the horse ridden, see which way the saddle moves – if it goes over to the right (off-side) so that the left side is tight to the wither then wool should be added to the left side and vice versa. Shims in a suitable adjusting pad may also work. If you are adjusting air or flock to keep the saddle straight, the saddle must NOT be used on any other horse. This can be re-adjusted by a total reflock or adjusting the air if you no longer use the saddle on the uneven horse.

Poor shoulders

Flat 'poor' shoulder will tend to allow the saddle to move forward on to the shoulder and neck, especially if combined (as is often the case) with a well sprung rib cage. Answers as with fitting natives and Arabs.

Well sprung rib cage

This is when the ribs are very rounded, they appear to rise up from the spinous processes before shaping down to make the horse's sides. Saddles will tend to be driven forward on to and sometimes over the shoulders. Deal with this as for natives and Arabs.

Herring gutted. No girth groove

Herring gutted is a term used to describe a horse with an abdomen that slopes up sharply behind the girth, like that of a greyhound. The upward slope of a herring gutted horse goes from the front to the back of the underbelly.

These conformation faults will lead to the saddle moving back. Try a Grip/ Impakt/Limpet pad first. A breastplate or breastgirth is essential for safety if jumping, cross country or hacking in hilly country. If using a hunting breastplate, make sure that it fits, and to achieve a useful fit it will need to be fully adjustable. Breast-girths can sometimes restrict the movement when working. There are now several much better designs of breastplate/girth on the market and these should be tried. Avoid the elasticated breastgirth without a body part between the front legs, as this will run up the horse's neck and constrict his breathing. A serge panel on the saddle may help.

Steeple back. Flat or slab sides

This is when the rib cage runs down very flat without any outward swell, which is where the saddle would usually rest. The result is that what looks like a good fit will drop down onto the wither when ridden in. Keep the tree as snug as you can and have plenty of panel, well flocked. This will need to be supported by extended tree points. The saddle will look as if it is sitting far too high when first put on but will quickly settle once the horse is ridden in it.

Girth groove forward of usual position

The girth will move forward into the girth groove, bringing the saddle forward onto the shoulder. Fit girth straps angled straight down, not back (even if this involves laying it through the front of the panel in a dressage saddle) and add a swinging/ self centering back strap to prevent bounce and lift. A curved girth will really help if of a suitable design. Non-slip pads and serge panels can also help.

Higher in front than behind (Uphill)

This will tend to tip the saddle back. Keep the front as close to the wither as you dare. Have plenty of surface area at the front of the panel but keep the flocking to a minimum. Extra deep gussets to the rear as with saddles for warmbloods. You may add blocks to the tree to give lift without making the flocking hard. Watch out for bridging!

Higher at the back than the front- a downhill ride

Have as flat a tree as the horse can take and the rider will tolerate. Either no gussets at the back, or narrow ones. TB/dropped panel with front gussets so that you can get plenty of lift to level the saddle. Remember to cut the panel quite full through the centre to prevent bridging. Flock the saddle standard at the front graduating down to much lighter at the back of the saddle.

Sway/hollow back

Find the most suitable dipped shaped tree that you can. Establish the position of the dip. Keep the front and rear of the panel flocked as light as possible whilst still giving clearance and balance. Cut the centre of the panel quite full and run the rear gussets in to the start of the sweat flap to give more room in the panel. You can add felt or firm foam to the underside of the tree where necessary to shape the tree to the dip and so support the panel.

Of course, often a horse with a dipped back may be old or not of high value so a bespoke saddle might not be an option. In this case, correction pads either filled with air (adjustable) or varieties of foam pads may achieve an acceptable fit without costing too high a price. Beware though of unintended consequences. Some of the foam pads are too firm and can cause pressure points in areas such as under the stirrup leathers and bars.

Flat, broad back, no withers

As flat a tree as the rider will tolerate. The saddle may feel unstable when ridden in as there is nothing for it to grip. Strapping as for natives. Grip pads. Consider serge panel. Make sure any saddle pads used are thin and of cotton. High Acrylic content makes the material quite slippery and will allow the saddle to move.

Saddle moving over to one side

Try to find the cause. Is it the horse or the rider? Is a girth with elastic one end being used? If the rider, advise them of the fact. Take photos or a video clip so that they can see for themselves. Suggest that they visit a physio/ chiropractor to check that they are square. Suggest methods to learn to ride square- involve the instructor here if you can. See Centaur Biomechanics 'Vision' jacket as a help in showing the rider their unbalanced position. If the horse, is it their action, conformation or muscle/ skeletal asymmetry or a mild lameness causing the problem? You can try balance straps, one-point strap, asymmetric flocking or fit with Flair airbags so that it will level itself out. Grip pads might also help. Be aware, however, that some horses move the saddle to one side because that is where it is comfortable for them, and if you get it to stay straight they may not be very happy about it.

Un-level action/stringhalt

Depending on the muscle development of the horse you may need panels of a different size each side, although this would make the saddle useless for any other horse unless the panels are replaced. Air bags are a great help as they will centre themselves, but very careful, asymmetric flocking may work. You may also need special strapping to keep the saddle square.

Injuries

Many injuries can influence the fit of the saddle. Always ask the horse's history as regard to injuries and look out for tell- tale signs such as scars and white hair on legs and elsewhere. You may see evidence of injury when the horse is 'run up.' Injuries to tendons, ligaments and to the sacroiliac area may not be obvious until the horse is seen moving.

Conclusion

Please remember that it is not always possible to get a perfect fit on some of these horses. It is not your fault that your client's horse is a bit odd, and they must understand the difficulties you face, and the risk of failure. Communication always, but especially in cases like these is of the utmost importance. Do remember to write down all that you have said, and get them to read, accept and sign it.


Note. For the assessment, you may be asked questions relating to conformation or movement abnormalities. You could be asked to name and describe one or two, asked to describe a named abnormality or suggest a saddle fitting solution to the difficulties caused by an abnormality.



The Saddle & Common Faults



1




CHECKING NEW SADDLES.

Does every new saddle arrive totally without faults?

Does every saddle come made exactly as you specified?

What should we be looking at?


2



We want to check:-

1. Symmetry of the Saddle –
 - I. Tree
 - II. Panel
 - III. Billets
2. Flocking – even and free of lumps
3. Condition of leather
4. Overall condition

3



Checking a second-hand saddle

What should we be looking at in a second hand saddle?

4

Safety in the Used Saddle



1. Symmetry of the Saddle.
2. The Tree
3. Stirrup Bars
4. Girth Straps and Webbing
5. Condition of flocking
6. Overall condition.

5

This IS a twisted tree.



6



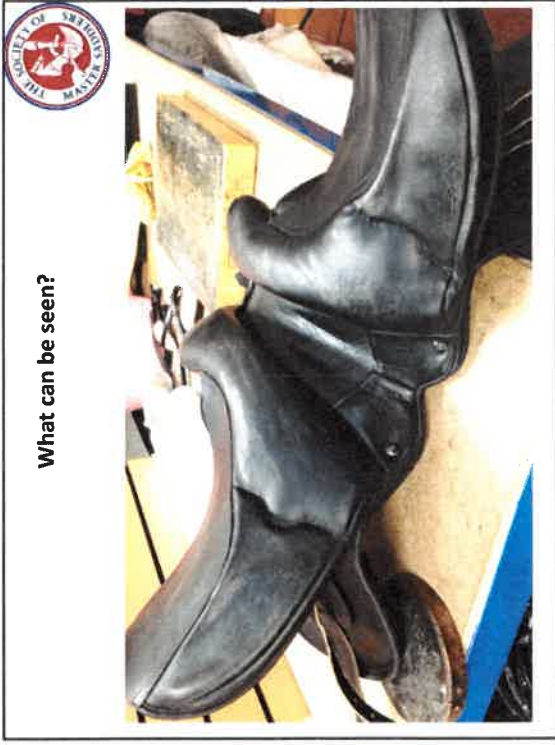
SADDLE PANEL PROBLEMS AND FAULTS

7

What can be seen?



8



What can be seen?



What can be seen?

9

10

The slide features the title "The Tree" in a large, black, sans-serif font centered on a white background. At the bottom, there is a dark blue footer bar containing several logos: a circular logo for "THE SOCIETY OF SADDLERS MASTERS" on the left, followed by icons for a tree, a horse, and a person, and a small rectangular logo on the right.

11



Trees should not be Repaired.

12



REPAIRING TREES

Why is it inadvisable to repair trees?

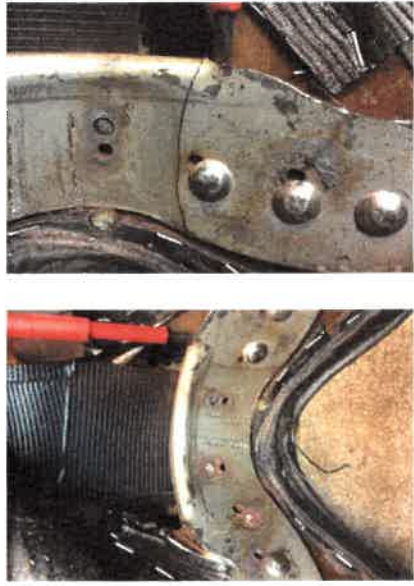
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14



These faults were only found when the panel was removed.



15



Another common issue



16

Is this an effective flexible point?!



17

Panel Fillings : Good or Bad?



18

Panel Fillings. What are the advantages and disadvantages of each?



19

It's amazing what you find in saddle panels



20





Panel Fillings



21



Girth strap Safety. What is important when replacing girth straps?



22



Possible cause?



23



What has happened?



24

Taking the Templates & Measurements



1

WHY?

- Record shape of Horse at the time of fitting
- Can be checked and compared on follow-ups
- Can be sent to manufacturer to make saddle

HOW?

2

There are 4 areas that need templating.
The first is 2" (5 cm) behind the scapula

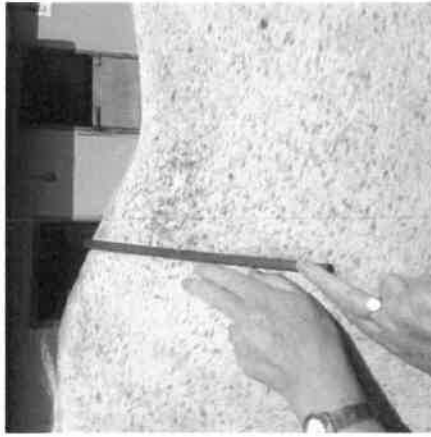


3

- This determines the width and shape of the front arch of the tree
- Use your fingers to find 2" (5 cm) behind scapula
- The horse must be stood square on a level firm surface.
- Place the flexi-curve over the back and mould it to conform to the horse's contours.
- Check both sides, get the horse handler to hold one side whilst you shape the other.

4

This measurement is 2" (5cm) behind the shoulder. Do make sure that if using a measurement such as '2 fingers' it is actually 2"



5

Transfer this shape to your paper

- Lay this shape onto your paper
- Draw around the underside of flexi-curve, supporting it so that it doesn't lose its shape
- Keep the left side of the horse on left side of paper
- Mark left and right on the template

6

Saddle Fitting Form

Name: _____
 Location: _____
 Title: _____
 Email: _____
 Date: _____
 Address (do not include telephone area): _____

NOTES:

Information given on this form is not sufficient for a non-qualified person to purchase a saddle. The Society of Master Saddlers and Beta Saddlery Ltd. are not responsible for the suitability of the saddle or its use except for the saddle firm who provided these records.

Form approved by The Society of Master Saddlers and BETA

ADDRESS: _____
 CITY: _____
 COUNTY: _____
 COUNTRY: _____
 POST CODE: _____
 PHONE: _____
 FAX: _____
 E-MAIL: _____
 WEBSITE: _____
 COMMENTS: _____
 DATE: _____

The second measurement is 2" (5 cm) behind the first. 4" (10 cm) from the back of the scapula.

- This will show the shape needed for the side rails.
- Take the shape as before, working from both sides and draw it on your paper below the first pattern.

7

8

Weight Tape / girth measurement

- Get a weight tape and measure around the horse's girth
- This should be at the smallest part and reasonably tight
- Record the measurement in CENTIMETRES
- Do not record the weight as weights are approximate and vary from tape to tape

17

Measure tape the horse



18

Why take the girth measurement?

- Useful guide to changes in condition of horse
- Client can be encouraged to measure their horse regularly to note weight loss or gain
- As a rough guide 5 cm can equate to 40 kilos weight change

19

Condition Scoring

Activities and resources useful in practicing condition scoring:

- Assessing horses for condition.
 - These could be owned by a client or a riding school or similar e.g. a dealer's yard
- Looking at working or competing horses and horses in the various competitive disciplines
- Incorporating assessment and recording of condition in saddle fittings
- Equine Industry Welfare Guidelines Compendium for Horses, Ponies and Donkeys. DEFRA



1

Relevance to saddle fitting

- Condition changes through growth and changes in diet, management and work
- Good saddle fitting for long term customer satisfaction takes account of a horse's current and future condition
- Assessing and recording condition at the time of fitting provides a baseline for reviewing saddle fit, discussion with the owner and possibly resolving disputes later
- Many owners unaware of their horse's condition, they may not realise how much and how quickly horses can change condition and the implications for saddle fit

2

2

Fitness vs. Fatness

- Condition is a combination of muscle and fat – a horse can be well muscled and still carry excess fat or can be under-muscled and carry a lot of fat
- A fit horse has well defined muscles, appears filled out and feels different to a simply fat horse
- To assess muscle development feel the big muscle groups of inner and outer hind limb, quarters, topline and neck

3

3

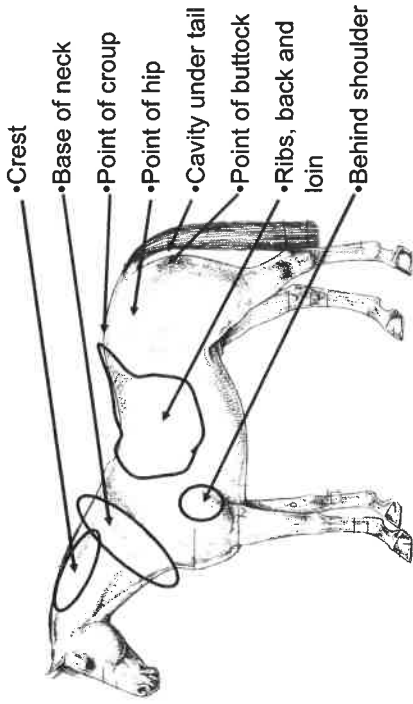
Method of condition scoring

- The following descriptions and pictures will help you get a feel for various levels of condition scored 0 to 5
- It is important to practice assessing and recording condition
- Half scores are useful e.g. 2.5, 3.5
- **It is a part of the SMS recommended procedure to measure the horse's girth as a record of its condition at time of fitting**

4

4

Areas to observe and feel



Adapted from Pony Club Manual

5

Notes and terminology

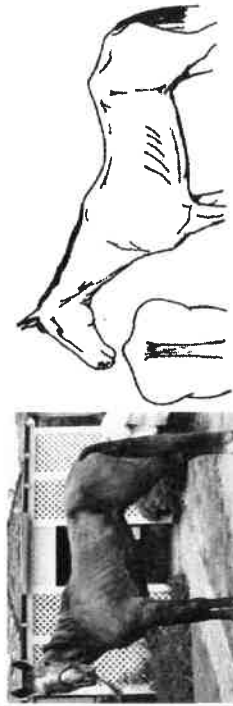
- Where prominent bony structures of the quarters are referred to we use the terms “points of the pelvis” or simply “points”.
- The points of the pelvis are the points of the hips, buttocks and croup.
- It should be noted that the bony points of the horse do not change shape but they become more or less obvious relative to the changing surrounding tissues
- In the absence of underlying causes, loss or gain in condition is generally symmetrical

6

6

Score 0 Very poor

- **Quarters** - Line croup to dock is straight or concave. Points very prominent. Deep cavity under tail. Skin tight. Main muscles of quarters although equal seem sunken.
- **Back and ribs** - Skin tight over ribs Very prominent backbone with ridged appearance due to lack of top line muscle.
- **Neck** - Marked ewe neck and hollow in front of shoulder.



Adapted from Carrill and Huntington (1981, EU). Illustrations are shown courtesy of Dodson & Horrell Ltd

7

7

Score 1 Poor

- **Quarters** – Points of pelvis still very prominent. Tissue mass sunken over rump but skin less tight. Continuing deep cavity under tail.
- **Back and ribs** - Ribs easily visible. Backbone still prominent with continuing loss of topline bulk.
- **Neck** - Ewe neck, slack and narrow at base



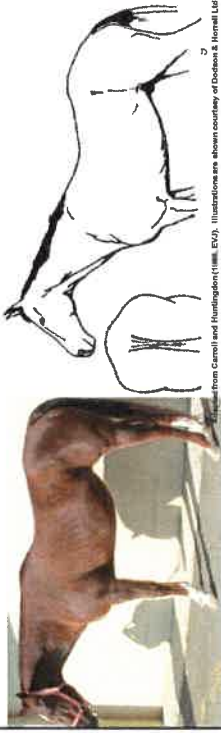
Adapted from Carrill and Huntington (1981, EU). Illustrations are shown courtesy of Dodson & Horrell Ltd

8

8

Score 2 Moderate

- **Quarters** - Rump when seen from behind is fuller but not fully rounded. Points are less prominent. More bulk filling between points. Lesser cavity under tail.
- **Back and ribs** - Ribs just visible throughout. Backbone spine tips less prominent but still easily felt. Topline muscle beginning to build up with increasing subcutaneous fat.
- **Neck** - Still narrow due to lack of muscle but feels generally firmer above neck bones.

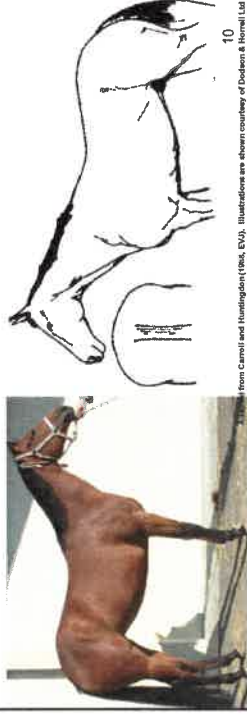


Adapted from Carroll and Huntington (1984, EVJ). Illustrations are shown courtesy of Dodson & Horrell Ltd

9

Score 3 Good

- **Quarters** - Becoming well covered by developing muscle and fat. Points still easily felt but no gutter in midline.
- **Back and ribs** - Ribs just covered, increasingly so, further forward but can be felt with some digital pressure. Back area and loins becoming fuller but muscle development is dependent on work done.
- **Neck** - No crest (except for stallions) but areas above and below neck bones feel and look fuller.

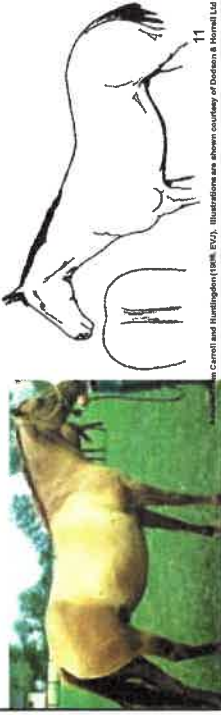


Adapted from Carroll and Huntington (1984, EVJ). Illustrations are shown courtesy of Dodson & Horrell Ltd

10

Score 4 Fat

- **Quarters** - Increasing condition each side of midline results in gutter formation from croup to tail and less so from croup forwards. Although points are still palpable it is impossible to feel underlying bone.
- **Back and ribs** - Ribs still palpable but in the fitting horse the line of the posterior ribs can be seen and felt. Marked gutter along backbone.
- **Neck** - Beginning of a fat induced crest makes neck seem wider under crest than nearer neck bones unless muscle development is co-existent.



Adapted from Carroll and Huntington (1984, EVJ). Illustrations are shown courtesy of Dodson & Horrell Ltd

11

Score 5 Very Fat

- **Quarters** - Deep gutter to root of tail. Area irregularly distended from selective fat deposits on top of muscle. Points still palpable but not obviously prominent.
- **Back and ribs** - Back and quarters developing breadth and a flatter profile. Ribs buried, cannot be felt. Deep gutter along back. Back broad and flat
- **Neck** - Marked crest more noticeable than score 4. Areas of fat deposits in irregular contours. Overall a very rounded appearance.




Adapted from Carroll and Huntington (1984, EVJ). Illustrations are shown courtesy of Dodson & Horrell Ltd

12



Observing the Horse in Movement



1

Relevance

- Assessing the horse's movement in hand underpins;
 - Deciding on whether the horse is sound to fit
 - Establishing a baseline for quality of movement
 - Using quality of movement as an indicator of good fit
- Assessing movement in hand is part of the assessment requirements

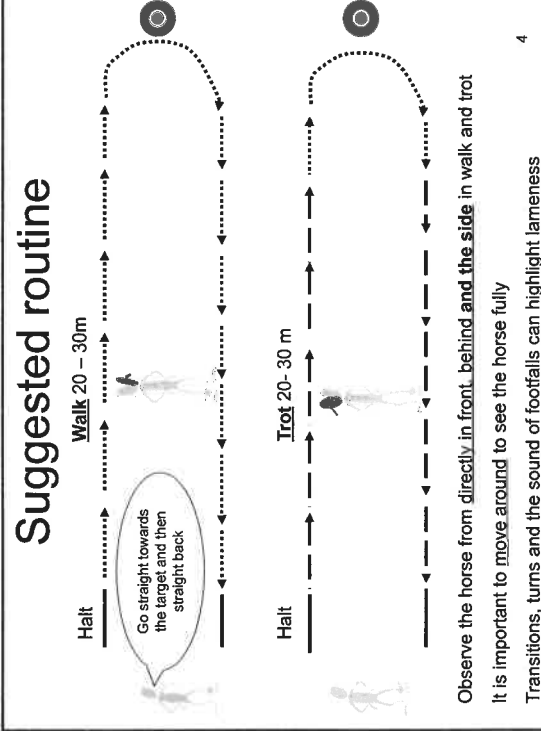
2

Handler, Horse, Environment

- **Handler**
 - May not realise this will be part of the procedure
 - May present the horse well or may need guidance on how to show the horse to allow thorough assessment
 - Must have proper control
 - Must be able to leave the horse's head free to move
- **Horse**
 - Alert and reasonably energetic
 - Not so fresh it can't be allowed to move freely
 - Most appropriately in a bridle
- **Environment**
 - Preferably enclosed, level, hard and grippy

3

Suggested routine



Observe the horse from directly in front, behind and the side in walk and trot. It is important to move around to see the horse fully. Transitions, turns and the sound of footfalls can highlight lameness.

4

At rest look for;

- A horse "at ease" rather than too formally shown
- Willing to bear weight fully on all limbs
- Freedom from excess tension
- Take time viewing the horse, take in the overall picture first



5

In movement overall look for;

- Willing attitude
- Ears pricked
- Movement should match size, type and conformation of the horse
- Relaxed
- Purposeful
- Symmetrical
- Equal use of all body parts

6

From the Side look for;

Overall

- Loose easy movement
- Note easiness and range of movement of the shoulder
- Even bending of joints of left and right limbs
- Hind limbs engaged / tracking up equally
- Even height of foot flight
- Note any toe dragging

Walk

- Clear 4 time beat
- Even use of head and neck in synchrony with the forelegs

Trot

- Clear 2 time beat
 - Possible suspension in very good movers
- Head and neck nearly still
 - No nodding

7

From Behind look for:

- Straightness from tail to poll
- Tail carried midline and swinging evenly
- Hind limb deviation or swinging
- Even movement left and right sides
- Even height of hind limb steps
- Landing evenly across the hoof
- Even flexion of hind joints
- Even height of points of hips

8

7

8

From in front look for:

- As from behind plus:
- Forelimb deviation/ swinging
- Landing flat across the foot
- Forelimbs loaded evenly (uneven loading can often be heard if not visible)

9

9

Signs of a good

Walk

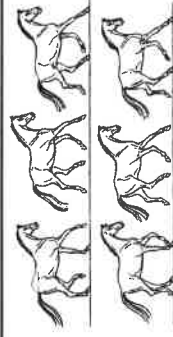


- 4 beats NH NF OH OF - No suspension
- Variations - Collected Medium Extended Free
- Easy, natural extension and retraction of the head and neck
- Equal & appropriate bending & engagement of the hind legs
- Even lateral swing through the body
- Tail carried & swinging evenly

10

10

Signs of a good Trot



- Two beat diagonal pairs with suspension in good moving horses
- Variations - Collected Working Medium Extended
- Equal & appropriate bending & engagement of hind legs
- Tail carried & swinging
- Head carried more or less still

11

11

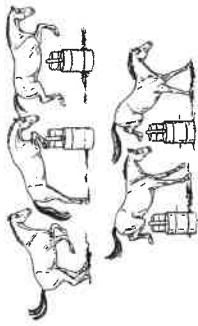
Signs of a good canter



- Three beat gait (with suspension)
- Left & right handed gait Outside Hind Outside Diagonal Inside Fore Suspension
- Natural use of the head & neck
- Lengthening & shortening of the frame through stride
- Raising & lowering of the body through stride
- Tail carried & swinging
- Equal quality and ease left & right
- Possibly the pace requiring the greatest flexibility of the body

12

12



Signs of a good Jump

- Balance & symmetry at take off & through jump
- Fluid change of posture through jump
- Co-ordinated use of the body and easy use of the head & neck
- Ability to stretch the frame over fence & to bascule
- Equal use & flexion of all joints especially of the shoulder and forelimbs

13

13

Faults in Movement

- Pottery movement – short stilted gait
- Dishng / Wingng –inward or outward swing of the hoof
- Brushng / Going close
- Paddng – lower leg rolls out
- Plaitng – swinging hind leg around the other
- Trailing hind limbs
- Forng / over-reaching
- Stringhalt – exaggerated upward movement of hind limb

14

14

Additional Considerations

- Uneven footfalls can often be heard more clearly than they can be seen
- Its abnormal for a horse to rest a forelimb or persistently rest one hind limb
- It can take some time to observe a horse thoroughly in hand
- If a horse is lame it is important not to offer any diagnosis but to encourage the client to consult a vet
- Note marked or unequal wear on toes or branches of shoes, brushing injuries etc

15

15



Saddles can allow or reduce:

- Suspension
- Softness, fluidity, easiness of movement
- Clear sequences in the steps
- Poor saddle fit can cause the horse to be unwilling to jump or make other movements desired by the rider

A saddle's effect in degrading movement can be immediate. Its effect of allowing better movement might take time and good riding

16

16



Observation of movement under the rider
(In a safe area with a secure surface)

- Allow plenty of time
- Consider having a set routine
 - Straight away & towards the observer are very useful but be sure to watch from the side also
 - Standing outside a circle or turn is very useful
- Look for the same overall qualities as we have seen on lunge
- Try to get the rider to ride with minimal influence to begin
- When trying saddles look especially for changes in movement under different saddles

17

17

Previous participants have found these activities and resources useful

- Practicing observing horses in hand
- Discussing horses in movement with experts
- Observing horses for example at a sale and describing their movement
- The Pony Club Manual of Horsemanship 12th Edition

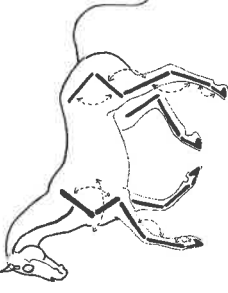
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18

Movement & Muscular Development

Movement comes from:

- How bones are arranged (conformation)
- The range of movement allowed by joints, ligaments & muscles.
- The co-ordination & power with which the joints are moved by muscles, tendons etc
- Rider and saddle influence



Horse Structure & Movement

1

- Muscular development comes from the adaptation of muscles to work (or lack of work)
- The best way of working muscles is to promote good movement
- Good movement requires the muscles to move the horse's skeleton & so they exercise and develop
- **Muscles don't move unless they are able & allowed & encouraged to do so. This is the essential point in fitting a saddle that allows maximal pain free movement.**

2

1

2

Trainer / Rider approaches to developing movement

- Some examples;
 - Varying terrain
 - Polework eg trotting poles
 - Gymnastic jumping
 - Transitions and lateral work
- Caveat
 - Only a small proportion of riders have the ability to bring about improved movement in the horse. Unless the rider can create different or better movement patterns the horse is unlikely to develop physically.

3

Previous participants have found these activities and resources useful

- Observing horses with various makes and shapes and muscular development
- Tracking clients' horses as they develop through work and management or through being allowed to move more freely with an improved saddle. This is made clear by templates that change over time.

4

3

4