

1 **Beef Cow Calf Emphasis: (8)**

2 **Response to specific e-mailed questions:**

3 1) **“Economic competency” (doing the right thing well enough and fast enough) in what 5 to 10 key**
4 **individual and herd clinical procedures make a new graduate most “practice-ready” and “value-**
5 **added” to both their client and their employer?**

6 **CC8:**

- 7 • Communication – conveying thoughts, recommendations, ideas effectively with clients and
8 colleagues
- 9 • Animal handling/restraint – knowing how to position yourself and handle the animal in an efficient
10 and quiet manner with and without a chute
- 11 • Rectal palpation
- 12 • Breeding soundness examination on bulls
- 13 • Obstetrical procedures (prolapse, dystocia, etc.)
- 14 • Unassisted gross field necropsy
- 15 • Clinical examination and auscultation with appropriate treatment recommendation
- 16 • Familiar with biologics, treatment, and vaccine protocols

17 **CC6:**

- 18 • Palpation
- 19 • Castration
- 20 • Diagnosis and Treatment

21 I have a hard time coming up with 5 for this. I will add that all new graduates need to be able to do some
22 things well that do not relate to their ability as a doctor. Such as back a chute. It is very easy to loose
23 face to a 60 year old farmer when the new kid cannot get the truck backed up to the barn.

24 **CC5:**

- 25 Empathy, understanding, appreciation, and a willingness to really find ways to improve the productivity
26 of client's operations.
- 27 • This entails identifying bottlenecks in production which may or may not be strictly Veterinary related.
 - 28 • Requires an open mind to seek outside help from nutritionists, behaviorists, lenders, etc. etc.
 - 29 • The Veterinarian is still the one person that is the most competent to put the puzzle together.
 - 30 • You never know what direction this will lead, but a passion and understanding of the producer's
31 plight will overcome any near term procedural problems. If you care, the client will appreciate it.
32 That initial extra effort will pay dividends for a practice life-time.

33 **CC4:**

- 34 • pregnancy detection
- 35 • bull testing
- 36 • necropsy
- 37 • obstetrics
- 38 • ration evaluation

39 **CC3:**

- 40 • The most glaring deficiency of new graduates is lack of business sense.
41 They are so focused on medicine that they cost money the first year of practice, if you are lucky
42 they break even the second year, and the third year will generate a profit. By that time a large
43 number of them become aware that there are other parts of veterinary medicine and they move
44 on. I have had many of them come back years later and wish they had stayed but for most the
45 part the old saying they will move at least once applies. If they move before 5 years I often
46 wondered if it was worth hiring them, the fun part was watching them blossom into good
47 practitioners.

- Communication

I became a Veterinarian so I would not have to deal with people and boy was I wrong. Talking to clients and maintaining confidence is a skill that can only be developed by practice (some new graduates. The art of listening is also a skill that all new graduates must develop. I find that if you listen, a lot of the time a client will point you in the right direction toward a diagnosis. Gary McIntosh told me to always tell a client what I did know and not what I did not know, and when I started to get behind and lose confidence ask them about their kids, or something they wanted to talk about, pretty soon they were telling me the whole story about the patient and so on.

CC2:

- Communication - Knowing how to talk to clients in language they understand (i.e. not exuberant granulation tissue, but proud flesh; not medial aspect of the tibiotarsal joint, but inside of the back leg).
- Proficient in rectal palpation
- Clinical examination including auscultation
- OB's (reducing dystocias, pulling calves, prolapse repair and C-sections in a field situation)
- Know more than one way to restrain an animal including using drugs
- Treatment protocols and advantages of drug choices
- Breeding soundness examination of bulls
- Vaccine protocols

2) What are the minimum performance benchmarks for these?

CC8:

I feel that speed and proficiency come with time, and it is better to do it correctly than quickly. Appearing rushed or hurried gives the client the impression that you do not have the time to meet their needs – even with seasoned veterinarians. (Efficiency will come with time, and as the economics of the practice become clearer to starting practitioners.) Communication is the most important of these competencies, as you want to sell your cognitive skills in addition to technical procedures.

CC6:

- Palpation – 95% accurate within 21 days < 100 days gestation
- Castration – hard to put a number on but efficiently enough to not slow down the flow of cattle.

CC5:

No question that basic skills are an advantage when beginning.

In addition to repro skills, sick animal care, diagnostics, etc., etc. the most important quality is animal compassion and how one comports themselves around the animals. The opportunity to spend time (summers, preceptorships, etc.) with practices that resemble what you want to do is the correct time to pick up the basics. The WSU environment did not really provide the opportunity for me to develop all of the tools I used in practice. (Vaginally spaying heifers for example) It is necessary to develop special interests and do what is required to become proficient. (All education costs something; time, money, extra effort, etc.)

CC3:

I found if I set bench marks on time for a procedure the end result was mistakes and mediocrity. I told them all we are not looking at how fast a procedure could be done but how well it could be done. Competence and speed came with repetition.

CC2:

I feel they should concentrate on accuracy rather than speed. The speed will come with experience.

- Communication - Hard to measure, but if you get a lot of dumb looks you may need to use less technical terms.
- Rectal palpation for preg check and estimating gestation from 45 days bred to term
- Know how to diagnose or work up common problems: lameness, inappetance, pneumonia, rumen impaction
- Know different ways to fix different OB's and advantages and disadvantages

- 1 • Minimal know how to restrain a cow in a chute. Better yet know how to cast a cow and how to keep
- 2 them tied down
- 3 • Know how to come up with treatment protocols for common problems: pneumonia, footrot, etc.
- 4 • Complete at least one full BSE on a bull
- 5 • Know how to discuss in laymen's terms the different vaccines available.

6 **3) “Economic competency” (rapid, efficient, minimum cost approach yielding practical results) in**
 7 **working up and making herd-specific recommendations for what 5 to 10 herd problems make the**
 8 **new graduate most “value-added”?**

9 **CC8:**

10 I believe it is not about knowing all of the answers, but knowing where to accurately and efficiently find
 11 them. It is OK to say, “Let me look into that for you,” but then you need to deliver impressively with the
 12 answer. To establish confidence in your abilities in the initial conversation, a solid working
 13 understanding of, and differential list for, the following needs to be conveyed:

- 14 • neonatal calf scours,
- 15 • low pregnancy rates
- 16 • pneumonia
- 17 • abortion
- 18 • low weaning weight, etc..

19 As with technical skills, the efficiency and accuracy of answering these questions comes with time and
 20 experience.

21 **CC5:**

22 Herd specific diagnostics requires record keeping to see what the trends are. It is often a requirement
 23 that the Veterinarian assist the producer in this effort. It usually took me three opportunities (teachable
 24 moments) to point out the economic disadvantage of responding thus, instead of investing in a solution.
 25 Once you win the confidence of the producer and work up that ladder of identifying the production
 26 limiting problem, it never stops.

27 **CC3:**

28 In my practice it is pregnancy testing (cattle and horses), a good physical exam. Followed by the ability
 29 to determine which lab tests would be most beneficial and not running a battery of tests that became
 30 cost prohibitive, the art of taking a dirty wound debriding, cleaning it, suturing, and get first intention
 31 healing, delivering a new born and knowing when to perform a c-section, being a good surgeon.

32 **CC2:**

- 33 • Neonatal Scours outbreaks
- 34 • Low pregnancy rates
- 35 • BVD outbreak
- 36 • Pneumonia outbreak
- 37 • Low weaning weight

38 **4) What specific experiences outside the traditional on-campus curriculum and for how long would**
 39 **maximize the “practice readiness” of new graduates? Where and how can students best obtain**
 40 **these?**

41 **CC8:**

42 Externships, internships, and preceptorships are all important in developing new graduates, but the
 43 time-frame is likely dependant on too many factors to set a specific time frame for competency. Getting
 44 experience in different situations is important in developing one's own practice and communication
 45 style, thus taking part in many different experiences is critical. Finding a good first experience as a
 46 veterinarian with practitioners willing to mentor is where “practice readiness” is gained. Mixed practice
 47 requires several “seasons” to approach the variety of problems encountered with a true level of
 48 readiness.

49 **CC6:**

1 Here [Midwest – JMG] students wanting to practice food animal can take an elective that allows them to
2 visit an approved practice for 3 – 6 weeks. This allows them to see a realistic environment and much
3 higher case load. Students with any hope of being “practice ready” need to strive very hard to take
4 advantage of this and other opportunities. We enjoy having these students and it is good for our
5 practice. It is somewhat frustrating as a private practitioner and business owner to put out expense
6 (housing, time etc) to educate students who are paying the university for these credit hours. For this
7 program to be truly successful and beneficial the practitioner should be compensated. Without
8 compensation it is hard on a busy day to warrant taking time to slow down and teach if I want to
9 continue to pay my staff. In today’s world where many students do not have an ag background a class
10 in animal handling skills would be vital.

11 **CC5:**

12 Your examples are correct [2 weeks working on the calving crew of a 10,000 head dairy and spending a
13 month on the treatment crew of a 30K head feedlot - JMG]. Time spent learning the technical aspects
14 requires hands on experience. I still believe that the 4 years of Vet school gives you the license to learn.
15 If the desire is there, the practice skills will be mastered soon and what distinguishes practitioners from
16 that point on is self motivation. Most of FA medicine in general is of a technical (technician) mentality.
17 There is more to herd health than palpation. The ones that distinguish themselves are the ones that
18 seek professional collegiality and give back to the community.

19 **CC3:**

20 This is the right idea, experience in the field is invaluable. When Frank Braken asked me a similar
21 question 30 years ago I told him to establish a large animal clinic in Lewiston or Clarkston and rotate
22 third and fourth year students thru. This should be staffed with Veterinarians that have experience in the
23 real world and not from academia. The same should apply today only much more diverse.

24 **5) What emerging technologies or opportunities should new graduates prepare for while in school?**

25 **CC8:**

26 Being able to communicate individually, for groups, and in written word is important for adding value to
27 our services. We likely are not going to be able to rely on the technical procedure efficiencies from
28 question #1 as a basis for our services. Producers are looking for information that they can use in their
29 operations to make and keep them profitable. Therefore, being aware of and familiar with the emerging
30 technologies is the key – and these will be continually changing.

31 **CC6:**

32 As agriculture consolidates even further I believe the cow calf veterinarian will become more to
33 resemble the feedlot veterinarian. Consultation, record management etc. We as a profession have long
34 given lip service in an effort to move away from “fire engine practice” but the shortage, or perceived
35 shortage of food animal veterinarians may actually drive this to reality.

36 **CC5:**

37 Bovine immunology for example. I spend most of my time now contradicting the old paradigms that have
38 been proven wrong. As Robert Larson states in his evidence based medicine presentation "50% of
39 everything you learn in Vet school will be proven incorrect or obsolete in 5 years". How do you prepare
40 for that?

41 **CC3:**

42 Two focuses:

- 43 • A food animal veterinarians should be able to show a client how their services will make money for
44 them
- 45 • All veterinarians should be able to run a business. One can be the best veterinarian possible and
46 still go broke. In my case a wife with an accounting major helped.

47 **6) What particular weaknesses do new WSU graduates have relative to those of other schools?**

48 **CC8:**

49 I have no reference for this question, but know that I felt adequately prepared from my education to
50 handle both small and large animal cases as a new graduate.

51 **CC5:**

1 I hired and had as preceptors, students from all over the U.S. I was generally quite pleased with our
2 WSU students. That is not to say that personal characteristics are not paramount, but I found the WSU
3 kids to be well prepared.

4 **CC3:**

5 I am not much help here as most students and veterinarians came from WSU. I can not put my finger on
6 why but the one or two students from A&M and Ohio State seemed to be more practice ready.

7 **CC2:**

8 WSU grad's are somewhat weak in field veterinary medicine since there aren't a lot of cattle around
9 Pullman

10 **General Responses:**

11 **CC7:**

12 In response to your input needs - I think some kind of preceptorship with veterinary clinics around the
13 country during summer breaks would be a great way to get hands on experience in many areas. I think
14 there are urban practices that aren't much benefit to them because liability concerns keep these practices
15 from letting the students do much more than glorified kennel work. But a roster of clinics that let them get
16 hands on should be organized with information regarding practice type and any other info that is pertinent.
17 Students at my practice (very rural and earthy) get hands on in both large and small animal (i.e. neuters,
18 venipuncture, lab form completion, clinical exam, patient monitoring, equine castration, etc.). We provide
19 them a place to live and minimum wage with no hour restrictions. Meals are offered at my residence next
20 door for no charge. So far the students seem to like the arrangement.

21 As far as comparing WSU skills to other schools - I don't have any to compare with except one. I hired
22 a CSU student in 200X for XX months. XXXX's clinical skills seem to be about the same as WSU students –
23 XXXX was not very proficient in people/life skills. I think it is hard for people who grow up in a city to switch
24 to small town living and what community obligations in a small town are. But, that was another story and the
25 person probably will do OK in a big city where they don't expect much community involvement.

26 **CC6:**

27 I actually sat in front of the computer for quite some time for the limited responses I gave and I can see
28 how this survey would be answered very differently by someone doing dairy practice. I think the most
29 important skills are not specific to veterinarians – people skills, problem solving skills. 75% of what I do
30 today is not related to what I learned in vet school. But the limiting factor I see with the students that go
31 through our practice is they do not want to commit to a job without set hours and emergency call that is not
32 able to compensate large salaries to do so.

33 **CC4:**

34 I hope that numerical skills will be important, but I certainly have not made them so yet. I don't think that
35 most veterinarians have the mind set to engage in analytic pursuits. I'm not sure I have the mind set to
36 pursue them in a market where every move has to be justified financially. I don't have the promoters' zeal,
37 and the promoters I've know don't have the data management and analytic horsepower to pull of what they
38 envision. So far, I haven't been able to must those either.

39 For all of these things, I think it is important for the students to know how they fit into the production
40 systems and what return they provide. That is more easily said than done. I've been reviewing some of the
41 literature related to bull testing. It is old and what I've seen is a little sketchy. I suspect that when we cull 5%
42 of mature bulls on semen quality, we generate a return for the ranchers, sometimes a handsome return if a
43 dominant bull is sub-fertile, but I wonder. I'm sure trich testing provides an excellent return for a newly
44 infected region where naive cows will suffer abysmal preg rates. I wonder about an area that is cleaned up,
45 or close to it, where cattlemen are vigilant and using young bulls.

46 Much of practice is relating to your clients. There is a fine line between brusquely efficient and so
47 yellow-dog friendly that you don't get much work done. I don't know that 4.0 students are well equipped to
48 find that balance.

49 **CC1: Mixed practitioner, beef cow-calf emphasis:**

50 I think that this is a very important project that is more noticeable since fewer students are farm
51 background. The ability to show what you can do for the first impression is very important, because a lot of
52 the time you don't get a second chance. The basic issues that I notice are being confident, but not arrogant-

1 sometimes a real issue, willing to say they don't know once in awhile, and learn to talk the clients language.
2 The everyday things like correctly Bang's vaccinating (including the paperwork), tubing a cow, palpating a
3 cow, c-sections, identifying a herd problem and solving it, noticing signs of feed issues (even if you don't
4 know that much about nutrition) and refer to someone that does, ability to work with foot issues and
5 treatment, diagnosis and treating mastitis, vaccinating correctly with speed, drawing blood and giving IV's
6 with large bore needles/catheters, and knowing where to stand/push cattle. Necropsy of normal and
7 abnormal animals quickly and alone. Replacement of uterine and vaginal prolapses with a majority of
8 animals living in the case of uterine prolapse.

9 These are all issues that should be basic to getting your foot in the door, but all this is secondary to
10 being able to talk to the client in language they understand and making them comfortable in accepting your
11 work/expertise. Communication ... communication ... communication. New grads have a wealth of book
12 knowledge, but putting that to use is a different beast altogether. Growing up on a ranch and riding with vets
13 for many years prior to vet school gave me a leg up on this aspect and I think it would be very stressful to
14 have to be a new grad and try to learn these issues at the same time. Hands on doing the dirty work is the
15 best way to learn and retain the information. Calving or lambing a large number of animals where you have
16 to assist in dystocias and some c-sections is a very good way to learn. Early identification of a sick animal in
17 a feed lot is very important but isn't very easy to do. Following a good pen rider around for awhile will really
18 help. Minimum benchmarks are difficult to say, as everyone learns at a different speed-"see one, do one,
19 teach one" always helped me retain information. Speed comes with repetition and familiarity. I think
20 practitioners realize that students aren't the fastest when they get out and the starting salary usually mirrors
21 that, but learning shortcuts from the experienced people will help this area. Emerging technology is going to
22 be an important aspect of the profession and cost efficiency/operational efficiency is going to dictate more
23 and more in the future. One thing that small animal and equine people have a hard time getting through their
24 head is a cow is only worth so much. A c-section on a cow is larger, dirtier and harder work than on a dog,
25 but you won't be doing any if you charge \$1500 to do it.

1 **Feedlot Emphasis:** (1)

2 **Response to specific e-mailed questions:**

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5 **added” to both their client and their employer?**
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- 14 6) **What particular weaknesses do new WSU graduates have relative to those of other schools?**

15 **General Responses:**

16 **F1:**

- 17 • To become economically sound first and Medically sound second. A MBA approach to Agri-business.
18 We had one business class in school at was not even close to what we needed.” Do not tear down
19 know areas of profit so that you can improve morbidity.” “It is less expensive for me to loose the
20 digestive deads then to change away from potatoes.”
- 21 • Take on “Prevention” pattern of thought rather then a “Cure” approach. Vaccines make us more money
22 that do antibiotics, with the possible exception of Metaphalaxis.
- 23 • Learn statistics
- 24 • Learn how to read the literature critically.
- 25 • Follow Dale Hancock’s’ approach to data.
- 26 • Learn to listen.
- 27 • Develop an intellectual network.
- 28 • Give away all your “Tasks” to the crew.
- 29 • Become a teacher.
- 30 • Always have goals and expectations, short and long term.
- 31 • Study motivation and how you get people to perform.
- 32 • Read “How to win friends and influence People” by Dale Carnegie
- 33 • Become an empathetic Coach.
- 34 • Learn both how to prioritize and risk assess.
- 35 • Learn to utilize the pharmaceutical Companies without getting too close. Image and perception is
36 everything.
- 37 • Learn how to evaluate data critically and efficiently. Learn where the “Red Flags” are.
- 38 • Build relationships that put you on the decision making team.
- 39 • Be a cheer leader when things are tough.
- 40 • Learn about successful systems and how to build them and tear them apart when needed. This takes
41 experience.
- 42 • Become above average in public speaking and all forms of communication.
- 43 • Develop follow through skills with return phone calls and more.

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- Learn how to market yourself with magazine articles and public speaking engagements. Most of our growth is still word of mouth. Good work gets 7 good comments and bad work gets 14.
 - Position yourself to stay on the leading edge of all technologies even when they do not directly have to do with what you are providing.
 - Learn negotiation skills. There are classes for this.