



CANDLEWOOD EQUINE

Artificial Lighting and Your Mare

Mares are what we consider to be seasonal breeders; that is they only come into heat certain times of the year. Most of the mares in the New England area will begin cycling in March or April and will stop cycling anytime from August to October due to the decreased day length. They enter what is called winter or seasonal anestrus. As the days become longer in the spring, the mare's hormonal system becomes more active and cycling begins again. As many breed registries use January 1st as the beginning of their year, it is important to have their mares foal as soon as possible after this date. To achieve this, considering the normal gestation period in mares is around 11 months, it is important that you start breeding your mare early in the year.

Artificial lighting has been used to stimulate the hormonal system of mares earlier than normal and allow earlier breeding to occur. It typically takes at least 60 days of light stimulation to take a mare from anestrus (non-cycling) into transition. It may take another month (a total of 90 days) for artificial lighting to establish a normal cycle; therefore ***we recommend that artificial lighting be started between November 15th and December 1st.*** Any type of light can be used: incandescent, fluorescent, mercury or sodium. You will need enough light in your mare's stall so that you are able to read a newspaper in any corner of the stall. This corresponds to a 200 watt incandescent bulb for a 12x12 stall so the mare is always within 8 feet of the light. You can also have 12 or more foot candles of light at eye level. This can be measured by a technique using a 35 mm single-lens reflex camera and reading the aperture. Most licensed electricians have a foot candle meter that you can borrow to check the lighting if necessary.

Research has shown that 16 hours of light exposure per day, beginning with natural sunrise is ideal for getting your mare to cycle earlier. It has been shown it is better to add supplemental lighting to the end of your mare's day rather than the beginning. *For example, if your sunrise is at 8:00 am, lights should come on at dusk and off by midnight. Never have lights on 24 hours;* this will hamper your efforts as mares need a period of darkness during each day.

PLEASE KEEP IN MIND: You should continue keeping your mare under artificial lights even after your mare has been bred and confirmed to be in foal at 45 days or until the natural daylight approaches 12-14 hours per day. (May 1st) If artificial lighting is stopped too early, your mare can go back into winter anestrus; a period of not cycling reproductively. It is also important to use this artificial lighting on pregnant mares so they will come into foal heat after foaling. Otherwise, pregnant mares may foal and then not cycle for a period of time which will delay them from breeding back the next year.

If you have any further questions or concerns, please contact our office directly.

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