

Colorado Parks and Wildlife Landowner of the Year Award

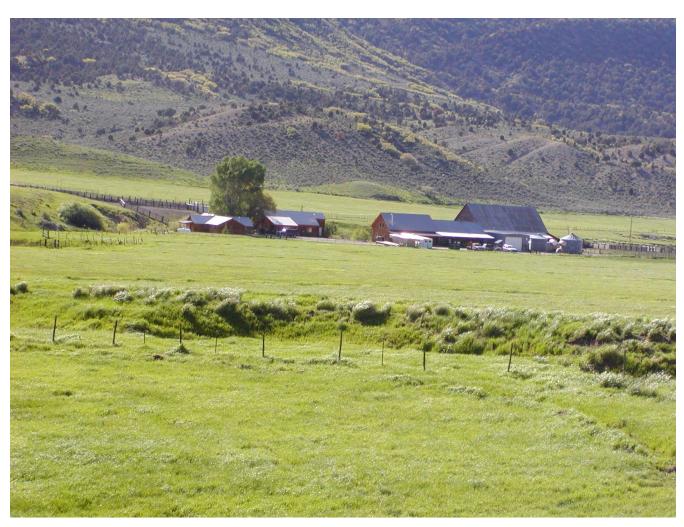
2012 Application

Applicants/Nominees:	The Klinglesmith Family on the LK Ranch
Names:	<u>Lowell and LoAnn Klinglesmith; and</u> Lenny and Jackie Klinglesmith
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Property/County:	<u>LK Ranch in Rio Blanco County, CO</u>

Application/Nomination Prepared and Endorsed by:

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Submitted Application via email by December 14, 2012 to: Ken Morgan ken.morgan@state.co.us



Description of the LK Ranch Operation and Current Management

The LK Ranch lies approximately 8 miles southeast of Meeker, Colorado, in Rio Blanco County. The LK Ranch is cooperatively owned and managed by Lowell and LoAnn Klinglesmith and their youngest son Lenny and his wife Jackie Klinglesmith.

The Klinglesmith family has developed a stellar history and record with local Colorado Division of Wildlife (CDOW) / Colorado Parks & Wildlife (CPW) in terms of having strong wildlife conservation and land management ethics which have been demonstrated through their significant long-term efforts to protect the outstanding wildlife conservation values of various properties including the LK Ranch with perpetual conservation easements which have been funded by a variety of sources (GOCO, NRCS, CDOW, etc.) and are held by the Yampa Valley Land Trust. The Klinglesmith family has worked cooperatively with CDOW/CPW since 2007 in order to successfully implement an integrated wildlife habitat and livestock management program as part of the CDOW conservation easement management plan for various parcels of the LK Ranch property.



The Klinglesmiths are the epitomy of the rural, hard working, honest, cattle ranching lifestyle and they serve as tremendous role models for all agricultural producers and private landowners in northwestern Colorado and beyond. All of the Klinglesmiths are well respected and are active in the local community of Meeker and Lenny Klinglesmith was recently appointed in 2012 to serve as the landowner/cattlemen representative on CPW's local White River Habitat Partnership Program (HPP) Committee. The White River HPP committee has been very successful at fostering working relationships with local private landowners to improve wildlife habitats and resolve big game conflicts.

In January of 2012, the Director of CDOW and the Wildlife Commission honored the Klinglesmiths longterm efforts and commitments to wildlife conservation by allowing enrollment of the LK Ranch property into the Ranching For Wildlife (RFW) Program at the Tier A status/placement level which is extremely rare. The Klinglesmiths were allowed to initially enroll their LK Ranch property into the CDOW's Ranching For Wildlife program with Tier A placement and status due to their exemplary livestock/habitat management practices and the perpetual conservation easements that the Klinglesmith family has implemented on the LK Ranch property.

The LK Ranch consists of approximately 13,000 contiguous deeded acres that are owned by the Klinglesmith family in game management unit 23. See attached and detailed topo map which depicts the property boundaries and location of the LK Ranch, which was enrolled into CPW's Ranching for Wildlife (RFW) program in 2011. The attached map shows the total deeded and leased acreage (private) of the LK Ranch RFW operation, and also depicts multiple land locked federal in-holdings of public land (BLM and USFS) and surrounding land ownerships as well. The 13,000 acre LK Ranch RFW operation consists of approximately 12,000 contiguous deeded acres that are owned by the Klinglesmith family in game management unit 23 plus another 1,120 acres owned by Michael and Mary Grady which are leased by the Klinglesmith family for a total enrollment of approximately 13,120 acres in the LK Ranch RFW program. The LK Ranch varies in elevation from approximately 6,400 to 8,200 feet, with precipitation ranging from approximately 13" to 20" per year. This diverse property supports a diverse range of plant communities including sagebrush, mountain shrub, aspen and conifer forest with riparian bottoms along several major drainages. Upland vegetation consists primarily of sagebrush and mountain shrubland communities interspersed with pinon-juniper woodlands at the lower elevations and aspen/conifer communities at the upper elevations.

While the 13,000+ acre LK Ranch property provides substantial wildlife value in and of itself, additional value is created when the property is considered within its regional context on a landscape scale. It is important to understand that as of June/July, 2011, the entire LK Ranch property complex, 13,000+ acres, has been protected via perpetual conservation easements that the Klinglesmith and Grady families have negotiated in multiple parcels in the past with a variety of entities including the CDOW/CPW, GOCO and the Yampa Valley Land Trust. The LK Ranch property provides regional connectivity between other protected landscapes that are critically important to wildlife populations in NW Colorado. The LK Ranch property is surrounded by White River National Forest to the south, L07 Hill/Mountain to the north (BLM), the Grand Hogback to the west (BLM), and Oak Ridge SWA (state property) to the northeast, all of which are incredibly important wildlife habitats.

The LK Ranch area is utilized on a year-round basis by elk and mule deer and a wide variety of other wildlife species including but not limited to greater sage-grouse, mountain lion and black bear.

The historical land uses on the various parcels that are currently managed/owned by the Klinglesmith family as LK Ranch have been domestic cattle grazing and agriculture. Irrigated pastures in the lower elevations along Flag Creek are used to produce/harvest grass hay that is necessary to feed the domestic cattle herds throughout the winter. Some alfalfa has also been planted on the LK Ranch at lower elevations along Flag Creek. Upland pastures and habitats at the mid to upper elevations of the ranch have traditionally been utilized seasonally by domestic cattle throughout the year in conjunction with public land cattle grazing allotments on the adjacent White River National Forest.



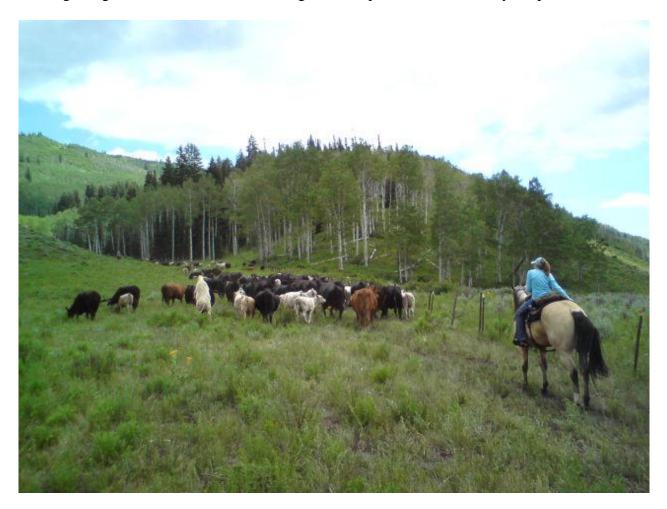
The Klinglesmith family has very effectively and strategically utilized funding obtained from perpetual conservation easement negotiations in the past in order to purchase neighboring ranch parcels that were merged with their original 3,700 acre base ranch operation along Flag Creek. Between 2007 and 2011, the Klinglesmith family successfully established perpetual conservation easements on each and every portion of the LK Ranch operation (13,000+ acres) which has outstanding wildlife values, and which by existence of the conservation easements provides perpetual preservation and protection of critical mule deer, elk and sage grouse habitat. The Klinglesmith family has negotiated multiple perpetual conservation easements that have protected a significant portion of critical wildlife habitat in NW Colorado.

The Klinglesmith family has demonstrated a long history of ranching heritage with a strong conservation ethic in the local community of Meeker, Colorado. The Klinglesmith family has served as a strong role model within the local agricultural community and together with CPW they have proven that wildlife managers and private landowners can accomplish tremendous things when they work together in a cooperative fashion.

Gradually, over the past 10 years or so, through various land acquisitions the LK Ranch operation has grown to approximately 12,000+ contiguous deeded acres in total (see attached map). In addition, the Klinglesmiths have also leased the cattle grazing and big game hunting rights on the 1,120 acre property owned by Michael and Mary Grady which is adjacent/contiguous to the LK Ranch property.

Competition for forage resources between big game and livestock has been an issue in the past for landowners, wildlife managers and land management agencies in the Meeker area. Stocking rates for the domestic cattle operation on the LK Ranch property vary depending on the season, pasture/location, annual precipitation

patterns, range condition and current goals and objectives; however, in general, the Klinglesmith family is currently running approximately 1,000 cow-calf pairs on the 13,000+ acre LK Ranch property. Obviously, this stocking rate could change annually in terms of the number of head of cattle and class/type of cattle that are run on the LK Ranch depending on the goals/objectives of the Klinglesmith family, cattle markets/economy, and climatic conditions. The Klinglesmiths have been very effective at implementing a short duration, high intensity rotational cattle grazing system across the landscape that has maintained the quality and diversity of the forage resources and wildlife habitat values on the LK Ranch; this grazing system has been very successful at meeting the needs of the domestic cattle operation, sustaining the quality of critical wildlife habitats and maintaining a high quality big game hunting operation on the LK Ranch. It is important to note that the Klinglesmiths are able to implement this sort of high intensity, short duration cattle grazing system on their LK Ranch property because they have a public land cattle grazing allotment on the adjacent White River National Forest and other private/state grazing leases which offers them a larger landscape and more flexibility to operate within.



Livestock/cattle grazing continues to be the primary agricultural use on the LK Ranch property. The cattle grazing and wildlife/hunting management on the 13,000+ acre property was finally consolidated under one management entity in 2010, which has allowed the Klinglesmith family to work closely with CPW to cooperatively manage the property for the benefit of livestock, wildlife and hunting. Livestock/cattle grazing is the most important factor and/or tool available for wildlife habitat manipulation on the LK Ranch property. Monitoring and implementation of a rotational cattle grazing system that balances the needs of the livestock operation with the requirements of the wildlife management and recreational hunting operations is the most important management practice on the LK Ranch property. Collaboration, cooperation, intensive monitoring,

and adaptive livestock grazing management strategies are implemented annually by the Klinglesmiths and the CPW in order to meet the long-term goals and objectives of the perpetual conservation easement and RFW management plans. Benefits from a well designed, short duration, high intensity cattle grazing system include reduced grazing pressure on riparian areas, better distribution of livestock across the landscape, and high quality forage/regrowth for wildlife during critical periods. The Klinglesmith family has mastered the art of utilizing livestock grazing across the landscape as a tool to improve the quality of the herbaceous forage available for wildlife on the LK Ranch.

Big Game Hunting and Public Access on the LK Ranch

The Klinglesmith family has operated a recreational fee hunting operation during the regular rifle big game rifle seasons each fall for many years on the LK Ranch. Hunting success rates for private mule deer and elk hunters have been very good in the past on the LK Ranch. However, the Klinglesmith family recently enrolled the LK Ranch property into CPW's Ranching for Wildlife (RFW) program so that they can have additional flexibility for managing and improving the quality of their recreational big game hunting operation.



The Klinglesmiths were allowed to initially enroll their LK Ranch property into CPW's Ranching For Wildlife program in 2011-12 with Tier A placement and status due to their exemplary livestock and habitat management practices and the perpetual conservation easements that they have implemented on the LK Ranch. The LK Ranch cooperatively developed and is currently implementing a RFW management plan with CPW that will meet the following high-performance criterion:

1. Premier Public Hunt Timing -the LK Ranch RFW offers public mule deer and elk hunts during premier

hunting opportunity periods (i.e., the rut/breeding season) and offers antlerless deer/elk hunts when there are seasonal concentrations of female animals available on LK Ranch.

- 2. Exceptional Hunting Services exceptional services are offered to public hunters on LK Ranch RFW without charge that are designed to provide public hunters with a hunt of exceptional quality and which will allow public hunter success rates to exceed 79%.
- 3. Special Donated Hunt Opportunities- the Klinglesmiths have donated at least 5% of the total LK Ranch RFW mule deer and elk license allocation each year for special, fully-guided hunting opportunities that include but are not limited to youth, disabled, or terminally ill hunters.
- 4. Exceptional Contribution to Herd Management Objectives LK Ranch will continue to work cooperatively with CPW to make sure that RFW seasons and license numbers are set each year which are in-line with CPW's goals and objectives for the White River Mule Deer and Elk populations.
- 5. Exceptional Contribution to Resolving Big Game Conflicts LK Ranch will continue to work cooperatively with CPW to resolve any potential game damage conflicts on nearby lands, should that become an issue after enrollment in RFW program.
- 6. Species Management Partnerships and Special Opportunities –LK Ranch will continue to work collaboratively with CPW and others to implement integrated resource management approaches for perpetual protection, enhancement and recovery of the greater sage-grouse population in the Meeker/White River area. This is the smallest greater sage-grouse population in NW Colorado, is currently a species of very special concern to CPW and is currently being considered federally as an endangered/threatened species. In addition, LK Ranch will continue to coordinate a variety of special opportunities and activities with local CPW personnel including habitat monitoring and conservation easement workshops and tours.

In 2007, the Klinglesmith family entered into a cooperative management plan with CDOW through the conservation easement program in order to monitor, manage and improve the wildlife habitats on the 2,905-acre Berryman parcel of the LK Ranch. In 2011, the Klinglesmith family entered into additional perpetual conservation easement agreements with CDOW which extended the cooperative habitat management plan to cover all of the other portions of the LK Ranch operation (Sheridan, Yount, and main LK base ranch parcels). In addition, through the 2011 conservation easement agreements, the Klinglesmith family also granted limited perpetual hunting access to CPW for mule deer and elk hunting on the entire LK Ranch property. This perpetual hunting access) requires a minimum of 4 buck mule deer hunts, 4 bull elk hunts and approximately 20 cow elk hunts per year in perpetuity on the 13,000+ acre LK Ranch RFW operation.

In addition to the 25+ public mule deer and elk hunters that are granted access to the LK Ranch each year per the perpetual conservation easement agreements, the Klinglesmith family continued to go above and beyond by graciously offering one fully guided buck mule deer hunt and five semi-guided cow elk hunts on their RFW property to local youth in the fall of 2012. It is important to note that in fall of 2009 and 2010, the Klinglesmith family generously donated/offered a total of 12 unguided cow elk hunts to the general public, one fully guided youth bull elk hunt, and two fully guided buck mule deer youth hunts through the CDOW's hunter outreach program. It is important to note that each of these public mule deer and elk hunts on the LK Ranch are extremely high quality, once-in-a-lifetime type of big game hunting opportunities in the heart of Colorado's largest mule deer and elk populations in the White River Valley.



Long-Term Wildlife Habitat Goals and Strategies on the LK Ranch

The Klinglesmith family has mastered the art of cooperatively designing and implementing a sustainable rotational livestock grazing operation that meets the needs of the agricultural operation while maintaining and/or improving the quality of forage/habitat for target wildlife species on the LK Ranch. The Klinglesmith family will continue to treat the majority of the habitats on the entire 13,000+ acre LK Ranch property every year with high intensity, short duration, rotational livestock grazing management practices early in the growing season which are jointly approved and monitored by the landowner and CPW. Livestock grazing is the single most important and dominant vegetation management tool that has been implemented on the LK Ranch.

The LK Ranch is surrounded on three sides by private lands and is managed in conjunction with a summer/fall public land grazing allotment on the adjacent White River National Forest and with other private (K Bar T Ranch) and public (BLM in Utah) grazing leases for wintering of cattle herds. Therefore, much of the LK Ranch (i.e., mid to higher elevation habitats) is currently grazed by domestic cattle early in the growing season (late spring and early summer) prior to the Klinglesmiths moving the cattle up onto their grazing permits on the nearby White River National Forest. The majority of the property is currently fenced into fairly large pastures which are conducive to the current early season, short duration, high intensity cattle grazing system.

Livestock grazing strategies that the Klinglesmith family currently utilize on the LK Ranch include but are not limited to: prescribed livestock grazing that provides nutritious regrowth during a critical season for a target species of wildlife (i.e., spring, fall and winter); deferment of livestock grazing or crop harvest (i.e., alfalfa) that leaves high quality forage available during a critical season for the benefit of target species of wildlife (i.e., mule deer, elk and sage-grouse).



The Klinglesmiths will continue to work cooperatively with CPW to design and implement a rotational domestic cattle grazing system for the various plant communities and pastures on the LK Ranch which will ensure that the overall trend for rangeland ecosystem health is at a minimum neutral (per CPW conservation easement guidelines). Further, if the overall Grazing Response Index (GRI) score for a pasture or grazing unit is negative, then LK Ranch and the CPW shall jointly agree on manipulating livestock grazing management options (changing timing, intensity or duration) so that a plant community/pasture does not receive negative scores in two consecutive years. In addition to the GRI monitoring methods, a total of approximately 33 permanent photo points have been established and maintained annually within key habitats across the LK Ranch in order to assess changes and long-term trends in plant communities, range/riparian health, and grazing/habitat management.

The Klinglesmith family realizes that healthy and productive rangelands are the foundation of a profitable and sustainable ranching industry and wildlife management. It is not practical to develop specific livestock grazing prescriptions for each habitat life stage of greater sage-grouse, mule deer, and elk on the LK Ranch.



Therefore, livestock grazing management strategies on the LK Ranch have been geared at overall rangeland health that assists in maintaining high quality greater sage-grouse and big game habitat. Healthy and vigorous plant communities will decrease water runoff and erosion, provide for sustainable grazing systems, and provide high quality herbaceous understories for target wildlife species. The guiding principles and strategies for livestock grazing management on the LK Ranch have been: 1) try not to graze the same pasture at the same phenological stage year after year; 2) defoliate the vegetation moderately; and 3) provide for plant development, recovery and regrowth.

The Klinglesmiths understand that maintenance of adequate residual cover in the sagebrush understory is critical for successful sage-grouse nesting, and properly functioning and healthy riparian areas are important to maintaining brood rearing habitat for sage-grouse. In addition, the Klinglesmiths utilize livestock grazing as a tool to maintain diverse herbaceous understories within plant communities and to provide high quality herbaceous regrowth which is critical for meeting the nutritional requirements of big game animals on the LK Ranch. Progressive and integrated livestock grazing management is the primary tool that the Klinglesmiths have used to meet residual cover, riparian and plant regrowth requirements on the LK Ranch.

The Klinglesmiths work cooperatively each year with CPW (per conservation easement guidelines) in order to monitor and assess the livestock grazing management program and to evaluate habitat conditions on the LK Ranch using a variety of monitoring methods which include but are not limited to the establishment and maintenance of permanent photo points throughout each pasture on the property, the Grazing Response Index (GRI) method, and the proper functioning condition (PFC) riparian assessment method. This annual monitoring program which is implemented on the LK Ranch allows the Klinglesmiths and CPW to assess changes and long-term trends in plant communities, rangeland health, and grazing/habitat management.

The Klinglesmith family, in cooperation with CPW, have identified the following long-term, integrated habitat management goals for the LK Ranch:

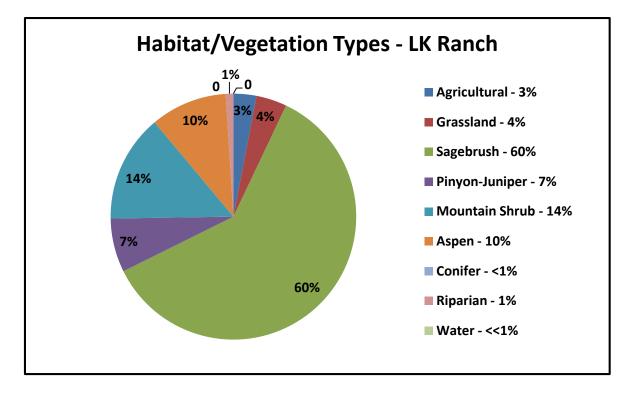
- 1. Work cooperatively with CPW to manipulate decadent/unproductive stands of sagebrush, pinyon-juniper, mountain shrub and aspen stands that are found on the LK Ranch in order to improve the quality and diversity of these important habitat types for benefit of mule deer, elk and sage-grouse. All of these habitat improvements and treatments will be designed/approved by CPW (per conservation easement guidelines) and will focus on relatively small and irregular treatments that are widely scattered through time and space in order to maximize wildlife benefits.
- 2. Protect, maintain and enhance all sage-grouse habitats (i.e., big sagebrush communities) on the LK Ranch due to the fact that greater sage-grouse are a CPW species of special concern in this area of NW Colorado and sage-grouse are also a target/mandated species per CPW conservation easement agreements on the LK Ranch.
- 3. Assist CPW with inventory and identification of important seasonal sage-grouse habitats (nesting, brood rearing, winter habitat) on LK Ranch.
- 4. Assist CPW with searching for any potentially active sage-grouse lek sites on the LK Ranch during the spring grouse breeding season (March-May).
- 5. Design, implement and monitor a sustainable rotational livestock grazing operation that meets the needs of the domestic cattle and agricultural operation while maintaining and/or improving the quality of forage/habitat available for wildlife on the LK Ranch per CPW conservation easement guidelines.
- 6. Aggressively identify, control and monitor any noxious weed infestations on the LK Ranch to avoid long-term losses of plant biodiversity and habitat quality.
- 7. Maintain, restore and enhance riparian areas and available water resources on the LK Ranch through habitat/water improvement projects and well managed livestock grazing management.
- 8. In conjunction with riparian enhancement projects, establish quality recreational trout fisheries and wetland/waterfowl habitats on sites where it is economically feasible and biologically practical to increase the diversity of available recreational opportunities (i.e., the east and main forks of Flag Creek and possibly a few spring fed pond sites in other areas such as west fork of Veatch Gulch) on the LK Ranch.
- 9. Interseed some irrigated crop land and upland dry cropland sites with high quality grasses, legumes/forbs, and shrubs specifically selected for mule deer, elk and sage-grouse. However, these interseeding/farming projects will be designed and planned so that they do not negatively impact the ability of the LK Ranch to sustain their agricultural and domestic cattle grazing operation per CPW conservation easement guidelines. Ideally these cropland treatments would enhance the quality of forage available seasonally for both domestic cattle and wildlife on the LK Ranch.

Current Wildlife Habitat Management Practices on the LK Ranch

Vegetation and habitat management are a key component of the LK Ranch conservation easement and RFW management plans. The Klinglesmith family has demonstrated a solid record and commitment to progressive habitat management activities which improve vegetation and habitat quality on the LK Ranch through their cooperative efforts with CDOW/CPW on all of the various parcels of property that are protected and monitored under perpetual conservation easements.

The diverse plant communities which are found on the LK Ranch RFW property are all important for meeting the seasonal habitat requirements of greater sage-grouse, mule deer, elk, and other wildlife species. The approximate acreages and percent coverage of habitat types and plant communities found on the LK Ranch RFW include but are not limited to the following:

- A. Agricultural (Hay Fields, irrigated meadow, etc.) 355 acres
- B. Grassland (dryland crop fields) 575 acres
- C. Sagebrush 8,063 acres
- D. Pinyon-Juniper woodland 899 acres
- E. Mountain shrubland (serviceberry, oakbrush, snowberry, etc.) 1,879 acres
- F. Aspen deciduous forest stands 1,357 acres
- G. Coniferous forest stands 91 acres
- H. Riparian areas 126 acres



While big sagebrush makes up the majority of the LK Ranch RFW property, several other vegetation types are present that are highly attractive to wildlife and that provide substantial vegetative diversity which supports a wide variety of wildlife species. The property contains significant stands of mountain shrub vegetation at lower and mid-elevations and many large aspen stands at higher elevations which are interspersed with the larger big sagebrush community. Each of these vegetative types brings its own suite of

wildlife species, particularly passerine birds, and adds markedly to the species diversity that the property represents as a whole. In addition, the riparian areas and water sources on the LK Ranch which are predominantly found along the various forks of Flag Creek and Veatch Gulch are incredibly important to all wildlife species throughout the year. In addition, the agricultural areas (irrigated hayfields) and grasslands (dryland alfalfa and non-native grass crops) can provide extremely high quality forage to wildlife species during critical periods. Coniferous forest and pinyon-juniper woodlands provide important thermal cover for big game and habitat for a wide variety of birds and other small game species of wildlife.

Below is a list of specific wildlife habitat improvement practices that have been implemented on the LK Ranch by habitat type/category. While specific acreages are included for each specific habitat improvement method/type, it is important to realize that short duration, high-intensity early season livestock/cattle grazing has been the predominant habitat management tool which has affected virtually 100% of the LK Ranch property in a positive manner.

<u>Agricultural Habitat</u>: approximately 355 acres of agricultural habitat which is dominated by irrigated and subirrigated hay meadows along the east and main forks of Flag Creek. The irrigated meadows have been used for either hay production or pasture for livestock on the LK Ranch. This plant community is dominated by non-native grasses and forbs that provide high quality hay and forage and these sites are all in good to excellent range condition with high productivity and resiliency to grazing pressure. The irrigated meadows on the LK Ranch are also used seasonally by mule deer and elk as well. The Klinglesmith family works very hard to effectively irrigate the irrigated agricultural habitat on their property each year and also works hard to control noxious weeds on the property.



Grassland Habitat: approximately 575 acres of grassland habitat, which is actually dominated primarily by dryland wheat, non-nativegrass and alfalfa fields on the LK Ranch at the lower elevations along Flag Creek. The grassland habitats, especially those along the eastern side of the Grand Hogback provide good feed and pasture for domestic cattle seasonally and also provide important feed for mule deer and elk, especially in the fall and winter. This plant community is currently dominated by non-native grasses and crops that provide good quality forage and these sites are all in good to excellent range condition with high productivity and some resiliency to grazing pressure. The Klinglesmith family works hard to control noxious weeds within the grassland habitats on the property.

In 2010, the Klinglesmiths tilled and replanted a 50-acre dryland field near their main LK Ranch headquarters into dryland alfalfa solely for wildlife with cost-share assistance from the local White River Habitat Partnership Program. This habitat improvement has been of tremendous benefit to mule deer along Flag Creek. Cattle grazing has been excluded from this 50-acre alfalfa field in order to reserve this prime forage for wildlife.

The Klinglesmiths are currently working cooperatively with the Natural Resource Conservation Service (NRCS) and the local White River Habitat Partnership Program (HPP) to implement a dryland agricultural reclamation project that will be completed in the summer of 2013. This project will entail water developments, installation of a sprinkler pivot irrigation system, and planting of approximately 85-acres of a custom legume/forb dominated seed mix specifically designed by CPW for the benefit of wildlife on the LK Ranch near the ranch headquarters (i.e., mule deer, elk and sage-grouse).



Big Sagebrush Habitat: approximately 8,063 acres of big sagebrush of mixed age classes and vigor are found on the LK Ranch property. This sagebrush community is part of the largest contiguous sage community remaining to the south and southeast of Meeker, CO. The primary sagebrush community type present on the property includes mountain big sagebrush (*Artemisia tridentata var pauciflora and var vaseyana*). Herbaceous understories in the sagebrush habitats are generally diverse, productive and vigorous due to the progressive rotational grazing management plan that has been implemented on the LK Ranch RFW property. The Klinglesmith family works hard to control noxious weeds within the sagebrush habitats on the property. The big sagebrush community is incredibly important for a variety of wildlife species including big game, but it is critical for sage grouse which depend on intact, diverse and healthy stands of sagebrush to survive throughout the year.

In September of 2012, the Klinglesmiths worked cooperatively with local CPW and White River HPP to improve the diversity and productivity of approximately 150-acres of sagebrush habitat that was dominated by old, decadent shrubs that were low in vigor and productivity. This 150-acre area of sagebrush was mechanically treated with a bull dozer pulling a roller-chopper in a mosaic pattern and was also simultaneously interseeded with a very diverse custom seed mix in an effort to improve the productivity and enhance the diversity of the sagebrush habitat primarily for wildlife (i.e., mule deer, elk and sage-grouse). The diverse custom seed mix, which was designed by CPW specifically for wildlife habitat improvement projects, consisted of highly palatable forbs, legumes, grasses and shrubs including small burnet, ladak alfalfa, falcata alfalfa, big bluegrass, Paiute orchard grass, winterfat, antelope bitterbrush, Utah serviceberry, and mountain snowberry.



However, since sagebrush is critical to the survival of greater sage-grouse on the LK Ranch and surrounding area, these conservative sagebrush habitat manipulations were carefully designed, planned and implemented by local CPW staff in order to avoid any potential negative impacts to the sage-grouse population. Additional conservative mechanical thinning and interseeding projects are already being cooperatively planned by CPW and the Klinglesmiths within other old, decadent stands of sagebrush on the LK Ranch property for 2013-14.



Pinyon-Juniper Woodland Habitat: approximately 899 acres of pinyon-juniper woodland habitat of mixed age classes occur on the LK Ranch. Some of the pinyon-juniper communities that are in a mature, unproductive state will be treated in a mosaic pattern to increase diversity within this community. However, treatments and manipulations should be very high priority on winter range sites where pinyon-juniper trees are encroaching into critical mountain shrub and sagebrush habitats. Herbaceous understories in the pinyon-juniper habitats are generally very poor in terms of diversity and productivity due to the dominant overstory and lack of moisture on these sites; removal of pinyon-juniper overstory on sites with decent slope/soil often results in dramatic increases in understory plant responses (shrub, grass, forb growth) and diversity. Pinyon-juniper woodlands are important for a variety of bird species, but are of very limited value to big game populations other than serving as thermal and hiding cover. Encroachment of pinyon and juniper trees into sagebrush habitats is a major factor contributing to the decline of sage-grouse populations in NW Colorado. Efforts are currently being planned on the LK Ranch to treat some of the pinyon-juniper woodland sites with prescribed burning and mechanical thinning methods to promote diversity and productivity within this plant community and minimize negative impacts to sage-grouse.

Mountain Shrub Habitat: approximately 1,879 acres of mixed mountain shrubland habitat dominated by gambel oakbrush (*Quercus gambellii*), serviceberry (*Amelanchier alnifolia*), chokecherry (*Prunus virginiana*) and snowberry (*Symphoricarpos albus*) of mixed age classes and vigor occur on the LK Ranch. These mountain shrub communities are interspersed in a diverse mosaic with the big sagebrush and aspen communities. Some of the older age class shrubs of poor vigor and productivity on the LK Ranch will eventually be treated to improve productivity and enhance the diversity of available shrub species (i.e., bitterbrush, mountain mahogany, rose, etc.). Herbaceous understories in the mountain shrub habitats are generally diverse, productive and vigorous due to the progressive rotational grazing management plan on the LK Ranch. The Klinglesmith family works hard to control noxious weeds within the mountain shrub habitats on the property. The mountain shrub community is incredibly important for a variety of wildlife species, but especially for mule deer and elk which depend seasonally on palatable shrubs for browsing. Mountain shrub communities should be manipulated frequently (every 5-10 years) so that they remain in a younger, more productive seral stage which provides nutritious wildlife forage/browse. Efforts will be made on the LK Ranch to try and promote establishment and persistence of bitterbrush on range/soil sites where it could potentially grow because bitterbrush is a key big game forage plant, especially for mule deer.

In the summer of 2011, approximately 25-acres of mature, decadent mountain shrub habitat (i.e., oakbrush, serviceberry and chokecherry) was mechanically thinned in a mosaic pattern with a hydro—axe/mulcher in order to promote diversity and productivity of vegetation for both wildlife and livestock on the Grady parcel of the LK Ranch RFW program. The Klinglesmith and Grady families worked cooperatively with the local NRCS and White River HPP to design and implement the mountain shrub thinning project specifically with wildlife habitat improvement in mind. Additional mechanical thinning projects are already being cooperatively planned by CPW and the Klinglesmiths within other old, decadent stands of mountain shrub habitat on the LK Ranch property for 2013-14 in an effort to improve the diversity and quality of habitat available for both wildlife and livestock.



<u>Aspen Habitat</u>: approximately 1,357 acres of deciduous aspen forest habitat of mixed age classes and vigor. These aspen stands occur at the higher elevations on the LK Ranch and are interspersed with the much larger sagebrush and mountain shrub communities. Although aspen may persist on the landscape for decades, often these communities are eventually replaced by conifers unless disturbances such as fire, grazing, or silvicultural practices reset those successional pathways. Aspen communities are quite valuable big game habitat and are present in sufficient supply on the LK Ranch RFW to permit some manipulation. Big game species often respond favorably to succession resetting techniques in aspen communities. It is also likely that aspen communities with their diverse and productive herbaceous understories and abundant insects are incredibly important components of higher elevation brood-rearing habitats for greater sage-grouse in areas like the LK Ranch RFW property where stands of aspen are distributed within big sagebrush communities.

Several scattered clearcuts of encroaching conifer and decadent aspen stands (totaling approximately 200 acres) were initiated on the Grady and Sheridan parcels of the LK Ranch RFW in 1998-1999, which have greatly improved the health and diversity of those aspen stands and have provided very high quality forage and habitat for mule deer, elk and livestock.



Additional silvicultural and aspen regeneration projects are already being cooperatively planned by CPW and the Klinglesmiths within other old, decadent stands of aspen on the LK Ranch for 2013-14. The Klinglesmith family works hard to control noxious weeds (i.e., hounds tongue infestation) within the aspen habitats on the property.

In the summer of 2011, approximately 50-acres of extremely dense aspen habitat was mechanically thinned in a mosaic pattern with a hydro—axe/mulcher in order to promote diversity and productivity of vegetation for both wildlife and livestock on the Grady parcel of the LK Ranch RFW program. The Klinglesmith and Grady families worked cooperatively with the local NRCS and White River HPP to design and implement the aspen thinning project specifically with wildlife habitat improvement in mind.



Coniferous Forest Habitat: approximately 91 acres of coniferous forest habitat of mixed age classes and vigor occur on the LK Ranch. These conifer tree stands include but are not limited to Engelmann spruce (*Picea engelmannii*), subalpine fir (*Abies lasiocarpa*), Douglas fir (*Pseudotsuga menziesii*) and blue spruce (*Picea pungens*). A few very isolated conifer tree stands occur at the higher elevations on the LK Ranch (primarily on the Sheridan parcel in Bloodsworth Gulch area) and are interspersed with the much larger sagebrush, mountain shrub and aspen communities. Large, contiguous stands of coniferous forest are found along the southeast boundary of the LK Ranch RFW on White River National Forest. Silvicultural treatments (clearcuts of approximately 200 acres of forested habitat in 1998-99) on the LK Ranch RFW have removed significant stands of conifer trees, which has promoted expansion and health of the aspen community in this area and has also promoted wildlife habitat diversity and livestock forage. While stands of conifer trees are valuable to a host of wildlife species, they are of very limited value to mule deer and elk populations other than for hiding/thermal cover. In addition, as a result of the silvicultural treatments in the past, the small patches of coniferous forest habitat that remain on the LK Ranch should be protected to maintain diversity on the landscape. While coniferous forests don't typically offer lots of forage for livestock and wildlife, it is important to maintain some coniferous tree stands on the LK Ranch RFW in order to provide hiding cover

for big game (i.e., elk and bear) during the hunting seasons and to improve hunter success rates and opportunity.



<u>Water Improvements and Riparian/Wetland Habitats</u>: approximately 126 acres of riparian habitat exist on the LK Ranch. The majority of riparian habitat and open water is found at lower elevations along the major drainages of the property, which include the east and main forks of Flag Creek. Other important higher elevation/upland riparian areas and water sources are found primarily along the three intermittent stream/sub-drainages on the property and are primarily small springs, seeps and man-made ponds (i.e., in the various forks of Veatch, Moog, and Bloodsworth Gulches). Multiple upland water habitat improvement projects have also been implemented on the LK Ranch as reliable/perennial water sources are fairly scarce in the higher elevation pastures on the property. The Klinglesmith family works hard to control noxious weeds within the riparian habitats on the property. Most of the riparian habitat is in good to excellent condition due to the rotational grazing management plan that has been implemented by the Klinglesmith family.

The Klinglesmiths have worked cooperatively with the White River HPP Committee and NRCS to develop many ponds, springs and wells and to install many miles of water pipelines and watering tanks for the benefit of both livestock and wildlife all across the LK Ranch property. Additional upland water development projects are currently being cooperatively planned by the Klinglesmiths and the White River HPP Committee for the spring/summer of 2013 (i.e., installation of solar pump system within an existing well/pipeline/tank system to ensure reliable delivery of water year-round for livestock and wildlife in the Sheridan parcel of the LK Ranch).



Relatively little open water habitats exist on the LK Ranch RFW because it is in relatively arid climate zone with moderate to low annual precipitation. The LK Ranch RFW encompasses approximately 6-7 miles of open water/perennial stream habitat along the east and main forks of Flag Creek. Flag Creek is not a quality fishery at this elevation on the main fork due to highly erodible soil types and sedimentation of substrate, but some potential likely exists for stream/fishery and possibly wetland/waterfowl habitat improvement projects on the LK Ranch RFW along the main stem of Flag Creek.

Significant fishery and wetland/waterfowl potential does however exist along certain sections of the East Fork of Flag Creek where several spring fed ponds on the LK Ranch RFW already exist that could potentially offer trophy trout fishing opportunities if they were improved with heavy equipment. Other spring fed ponds in the west fork of Veatch Gulch also might offer some potential as waterfowl and fish habitat if developed and improved.

In addition to the very limited deeper, spring fed ponds on the LK Ranch RFW, a lot of relatively shallow manmade ponds have been developed along the many intermittent sub-drainages of the property which offer some seasonal open-water habitats primarily for the benefit of cattle but also for big game and other wildlife species as well. These man-made ponds are critical to the success of the high intensity, short duration cattle grazing system on the LK Ranch in order to distribute forage utilization and grazing pressure across the landscape. Additional water improvement and spring development projects will continue to occur where feasible on the LK Ranch RFW in the future, to further improve the distribution and availability of open water habitats for both livestock and wildlife.



In 2011, a small ¹/₂-acre pond was excavated on the east fork of Flag Creek on the Grady parcel of the LK Ranch RFW which now provides habitat for trout, waterfowl and many other aquatic/riparian species. It is likely that additional fish pond/habitat improvement projects will be completed in the future on the LK Ranch.



Wildlife Species Found on the LK Ranch

The White River watershed which includes the LK Ranch near Meeker, is home to the largest elk and mule deer herds in the state of Colorado. These herds provide recreational and aesthetic values of regional and national importance. Economic benefit derived from these herds is of significant importance to Meeker and surrounding communities in NW Colorado. Many of these elk and deer are highly migratory, moving from 40 to 70 miles each way in a broadly east-west migratory pattern. Major migratory routes cross the Highway 13 corridor both north and south of Meeker. The LK Ranch property sits astride this southern migratory corridor. Several thousand elk and lesser numbers of mule deer move east to west across the property during the fall/winter migratory season and in reverse in the spring and summer. A secondary migratory pattern occurs in the Agency Park vicinity as mule deer and elk move between the Little Beaver Creek drainage, the Oak Ridge State Wildlife Area, the Meeker Dome and the LO7 hills. The LK Ranch property provides an important link in this localized migratory pattern also, serving as a bridge from the White River National Forest to both Oak Ridge and the LO7 hills. The northern end of the Grand Hogback, foothills of L07 and much of Oak Ridge SWA near the LK Ranch property provide the majority of the severe winter range habitat and serve as the primary winter concentration areas for many of the elk and mule deer in the Meeker area. Therefore, the LK Ranch property provides some high quality winter range habitat for deer and elk, but more importantly the property serves as a critical link in local and regional movements of big game between additional and much larger wintering areas that are near the LK Ranch RFW property.

Mule Deer

The LK Ranch property provides high quality year-round habitat for mule deer. Significant numbers of resident mule deer are found across the entire property spring through fall due to the high diversity and quality of deer habitat that occurs on the property. Mule deer make extensive use of the higher elevation aspen and mountain shrub communities on the property for fawning. Winter range habitats for mule deer (including a small section of severe winter range and winter concentration area) are primarily found at the lower elevations of the property along the Grand Hogback, Flag Creek corridor and Veatch Gulch. Mule deer numbers on the LK Ranch property fluctuate by season within the resident herd on the property throughout the year. Therefore, it is difficult to determine actual mule deer numbers on the LK Ranch property because of the migratory nature of the animals in the White River Deer Herd (DAU D-7). The current population estimate for the White River mule deer herd in DAU D-7 is below objective at approximately 58,000 deer, post-hunt 2011. What percentage of this huge deer population exists seasonally on the LK Ranch RFW is unknown at this time, but suffice to say a significant number of mule deer call the LK Ranch property home each year. The current sex ratio for the White River deer herd is slightly below objective at approximately 22 bucks per 100 does, however it is likely that the buck to doe ratio locally on the LK Ranch is slightly higher than the DAU average due to the high quality deer habitat and limited buck harvest and hunting pressure on the property.



CPW has been very concerned in recent years with the declining mule deer population trends in DAU D-7 and have been conducting many intensive mule deer survival/research projects within the White River/Piceance Creek area. The Klinglesmiths have been extremely supportive of CPW's efforts to sustain and manage the mule deer population and have allowed CPW to access their LK Ranch property year-round in order to conduct the long-term mule deer research projects.

<u>Elk</u>

The LK Ranch property provides high quality year-round habitat for elk. Significant numbers of resident elk are found across the entire LK Ranch property spring through fall due to the high diversity and quality of elk habitat that occurs on the property. Elk make extensive use of the higher elevation aspen and mountain shrub communities on the property for calving. Winter range habitats for elk (including a small section of severe winter range and winter concentration area) are primarily found at the lower elevations of the property along the Grand Hogback, Flag Creek corridor and Veatch Gulch. Elk numbers on the LK Ranch RFW fluctuate by season within the resident herd on the property throughout the year. Therefore, it is difficult to determine actual elk numbers on the LK Ranch property because of the migratory nature of the animals in the White River Elk Herd (DAU E-6). The current population estimate for the White River elk herd in DAU E-6 is just slightly above objective at approximately 40,000 elk, post-hunt 2011. The current population objective range for DAU E-6 the White River Elk Herd is 32,000 to 39,000. What percentage of this huge elk population exists seasonally on the LK Ranch RFW is unknown at this time, but suffice to say a significant number of elk call the LK Ranch home each year.





One of the biggest challenges in achieving an adequate harvest annually in the DAU is elk seeking refuge on large blocks of private lands to avoid hunting pressure. This is particularly a problem in this DAU since 41% of the land is privately owned, almost 60% of which is elk winter range. Elk hunting is big business in northwestern Colorado for some landowners, while other landowners do not allow hunting. Private landowners with hunting operations can make a substantial portion of their income from leasing to or outfitting for hunters. The demand is for bull hunting. Many landowners will not jeopardize their bull hunting operations by allowing cow hunters on their property during the regular seasons. The minimal hunting pressure on private land during the regular hunting seasons often results in sanctuary situations for antlerless elk, making them unavailable for harvest and increases the potential for these elk to become problem/damage causing animals later in the winter as the elk migrate west. For management purposes, due to the inaccessibility of elk to hunters during earlier regular rifle seasons, more of an emphasis has been placed on 3rd, 4th, and late season hunts to achieve antlerless harvest objectives. In order to manage this population to the long term DAU population objective, it is important for the CDOW to be able to work cooperatively with private landowners and federal land management agencies. The Klinglesmiths have been extremely supportive of CPW's efforts to achieve adequate in-season hunting pressure on their RFW operation so that elk harvest objectives can be met.

Greater Sage Grouse



The LK Ranch property is located within the largest remaining patch of greater sage-grouse (GrSG) occupied range in the Meeker/White River population. Occupied habitat for this population is split into five separate, relatively small parcels located north and south of the White River to the south and southeast of Meeker, CO. Occupied range for this population totals only 42,300 acres. Habitat loss from agricultural conversion and rural residential housing has affected this GrSG population since the 1950s. Recent land development trends have demonstrated increased interest in additional residential development in sagebrush habitat in the Meeker area.

The Meeker/White River sage-grouse population is the smallest in number and range of the six GrSG populations in Colorado and thus has the highest potential for extirpation. The population is located almost entirely on private lands that remain in active agricultural operations. Land conservation is one of the primary conservation strategies suitable for this population and is perhaps more effective and important here than in most of the other GrSG populations in Colorado given the size of the population, its limited range, and the private nature of land ownership in occupied range. The Meeker/White River GrSG population provides an important linkage between the NW Colorado population to the north and the Piceance-Parachute-Roan population to the southwest. Loss of the Meeker GrSG population could have a significant negative effect on long-term sage-grouse conservation efforts in neighboring parts of Colorado as well.

The LK Ranch property includes a substantial portion of the big sagebrush community remaining in occupied range for the Meeker/White River GrSG population. It includes important spring, summer and fall range for GrSG, including a large area of highly productive brood range. Currently active sage-grouse breeding leks are not known to exist on the LK Ranch property, but CPW biologists believe undiscovered leks may be located near or on the property. All other seasonal GrSG activities are known to occur on or adjacent to the property. The property is located within four miles of the only known active lek in this population. Approximately 80% of greater sage-grouse breeding leks on the LK Ranch property and the Klinglesmiths are committed to work collaboratively with CPW to bring back the local sage-grouse populations.

Unfortunately, the CPW does not currently have an estimate for the sage-grouse population on the LK Ranch or within the Meeker/White River sage-grouse population for that matter. Sage-grouse have historically occurred in large numbers on the LK Ranch and small numbers of sage-grouse have been recently documented on certain parcels of the LK Ranch during the summer months.

The Klinglesmith family has done far more for sage-grouse conservation in the Meeker area than any other private landowner in NW Colorado by protecting thousands of acres of critical sagebrush habitats on LK Ranch in perpetuity with conservation easements. The Klinglesmiths are very concerned about the future status of the greater sage-grouse and have been extremely supportive of CPW's efforts to protect and manage the dwindling sage-grouse population in the Meeker area.

Other Wildlife Species on the LK Ranch

While big sagebrush makes up the majority of the LK Ranch property, many other vegetation types are present that are also highly attractive to wildlife and that provide substantial vegetative diversity which supports a wide diversity of other wildlife species. The property contains significant stands of mountain shrub vegetation at lower elevations and significant aspen stands at higher elevations which are interspersed with the larger big sagebrush community. Each of these vegetative types brings its own suite of species, particularly of passerine birds, and adds markedly to the species diversity that the property represents as a whole.

Detailed wildlife surveys have not been conducted on the LK Ranch property, however the CPW has prepared an avian species list for the nearby Jensen SWA. The Jensen SWA is located approximately 15 miles north of the LK Ranch property and is vegetatively and topographically similar, though the LK Ranch property includes substantially more sagebrush habitat. The Jensen SWA bird list should be fairly accurate and similar to the avian species that would likely be found on the LK Ranch and that list includes 148 species of birds.

Columbian sharp-tailed grouse are known to occupy portions of the White River valley a short distance to the north of the LK Ranch on L07 Hills and Oak Ridge SWA. They have not been detected on the LK Ranch property but the mix of sagebrush communities with mountain shrub and aspen makes the property suitable habitat for sharp-tailed grouse. In addition, the coniferous forest habitats in the southeastern corner of the LK Ranch property and on the adjacent White River National Forest are designated by CPW as potential habitat for one of the states endangered species, the Lynx. The LK Ranch property provides habitat for black bear and mountain lion as well.

Integrated Long-Term Goals of LK Ranch for Agriculture, Livestock, Wildlife, and Recreation

The primary goal of CPW's conservation easement and RFW management plans on the LK Ranch are to protect in perpetuity and enhance the various plant communities and habitats for the benefit of greater sage-grouse, mule deer, elk and other wildlife species, while still allowing the flexibility necessary to maintain a sustainable agricultural and recreational big game hunting operations on the LK Ranch. The Klinglesmith family has used and continues to use the LK Ranch property primarily for livestock grazing and secondarily as high quality wildlife habitat to support a recreational deer/elk hunting business.

The various perpetual conservation easements will ensure that the LK Ranch property continues to maintain a diverse mosaic of agricultural, grassland, mountain shrub, sagebrush, pinyon-juniper, aspen, coniferous forest and riparian habitats such that it continues to support greater sage-grouse, mule deer, elk, and other wildlife species as well as livestock. Various habitat management strategies are being implemented by the Klinglesmith family in order to accomplish the goals of CPW's conservation easement and RFW management plans and include but are not limited to: active management of the various plant communities as needed through time to maintain the quality and quantity of these habitat types for the target species (mule deer, elk, and sage-grouse); conducting livestock grazing in a manner consistent with maintaining the health of the rangeland and riparian resources; and maintaining the ability of mule deer and elk to migrate through the property between summer and winter ranges. The CPW conservation easement and RFW management plans were designed to allow enough flexibility for continued recreational hunting activities and sustainable agricultural/livestock operations on the LK Ranch, while providing the desired habitat for targeted wildlife species for which the conservation easement was established (mule deer, elk and sage-grouse).

